'NON-TRUTH-CONDITIONAL' MEANING, RELEVANCE AND CONCESSIVES

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For my parents

– in memory of theirs

ABSTRACT

This thesis is concerned with the semantic function of linguistic elements which do not seem to contribute to the truth conditions of an utterance, that is, with 'non-truth-conditional' linguistic devices. The first part of the thesis is devoted to theoretical considerations, while the second part concentrates on 'concessive' linguistic devices, which form a sub-class of 'non-truth-conditional' expressions.

The first chapter outlines the way in which traditional semantic theories have employed the notion of truth conditions to capture linguistic meaning and a series of problems with this approach are pointed out. The chapter ends with an overview of 'non-truth-conditional' linguistic devices. Chapter 2 is concerned with ways in which fundamentally truth-conditional theories of linguistic semantics have attempted to accommodate such expressions in their frameworks. In chapter 3, the discussion focuses on Argumentation Theory, which does not just accommodate non-truth-conditional meaning but, ultimately, treats all linguistic meaning in non-truth-conditional terms and leads to the untenable conclusion that the general intuition that utterances can give information about the world is an illusion. This is followed by a chapter devoted to Sperber & Wilson's cognitive Relevance Theory. It is argued that this theory offers an ideal framework for a semantic analysis of 'truth-conditional' and 'non-truth-conditional' expressions alike, while avoiding the problems encountered by other theories.

The next three chapters investigate the nature of linguistic 'concessivity' and provide a critical survey of existing analyses of three specific 'concessive' devices: *but*, *although*, and *even if*. In each case, an original relevance-theoretic analysis in procedural terms is proposed.

In the last chapter, the possibility of purely pragmatic (that is, unencoded) 'concessive' interpretations is explored, and, finally, the role of the concept of 'truth-conditional content' in a theory of utterance interpretation is reassessed.

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CHAPTER 1
TRUTH CONDITIONS, LINGUISTIC SEMANTICS AND 'NON-TRUTH-CONDITIONAL' MEANING

1.1 Introduction

> For it is a truth implicitly acknowledged by communication-theorists themselves that in almost all the things we should count as sentences there is a substantial central core of meaning which is explicable either in terms of truth-conditions or in terms of some related notion [...].
>
> (Strawson 1971: 178)

> Or again it may be pointed out that even sentences to which the notion of truth-conditions does seem appropriate may contain expressions which certainly make a difference to their conventional meaning, but not the sort of difference which can be explained in terms of their truth-conditions.
>
> (Strawson 1971: 177)

These two quotes from Strawson encapsulate two striking points one comes across repeatedly in the literature on (linguistic) meaning. The first one is that, no matter what the background of a theorist – whether they are trying to say something about the meaning of words or sentences in themselves, or whether they are more interested in what speakers mean when they use words and sentences – sooner or later they find themselves (sometimes reluctantly) making use of the notions of truth and truth conditions. Given that there are considerable differences in general outlook and basic assumptions among these theorists, it is truly remarkable that the notion of truth conditions has played (and still is playing) such an all-pervasive role. In fact, there are not many theories that have done away with the notion altogether[1]. An explanation of this could lie with the undeniable fact that one, very central, way in which speakers use language is to say something about the world, to describe states of affairs, and the notion of truth seems to be one of the most useful tools in describing the relation between representations[2] and states of affairs in the world. However, for all its longevity and all-pervasiveness, the role the notion of truth conditions plays in accounting for linguistic meaning is far from unproblematic.

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[1] As will be seen in chapter 3, ultimately, Anscombre & Ducrot's (e.g. 1986) Argumentation Theory is an exception.

The other striking point, reflected in the second quote from Strawson, is that as soon as theorists start to account for natural language meaning in terms of truth conditions, they encounter linguistic elements which are undoubtedly meaningful, but whose meaning does not contribute to the truth conditions of the utterance in which they occur. Such 'non-truth-conditional' elements are of particular interest, because their existence means that theorists who employ the notion of truth conditions in their accounts of linguistic meaning can, at best, only account for a subclass (albeit a large one) of all meaningful linguistic devices.

Let me clarify exactly what kind of 'non-truth-conditional' meaning it is that this thesis is concerned with. Consider the scenario in (1).

(1) [Susan and Mary are talking about Mary's boyfriend Peter]
Susan: Is he good at buying you presents?
Mary: For my last birthday he bought me a pink scarf, even though I told him that I hate pink.

In this scenario, Mary's utterance will be true if and only if Peter bought her a pink scarf for her last birthday and (before that) she told him that she hates pink. However, Mary 'means' something more than just that. She also 'means' (or intends to communicate) that there is some incompatibility between Peter buying her a pink scarf and her telling him that she hates pink. Furthermore, in the scenario above, Susan will have every justification to assume that Mary also 'means' that Peter isn't good at buying her presents. In other words, there are two aspects of what Mary 'means' here that don't affect the truth conditions of her utterance (and are, therefore, 'non-truth-conditional'): the assumption that there is an incompatibility between two states of affairs and the assumption that Peter isn't good at buying Mary presents. The difference between these two aspects of the interpretation of Mary's utterance is that the former arises because of the linguistically encoded meaning of *even though*, while the latter arises because of the particular context in which Mary made her utterance.

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[2] The word *representation* is meant to be a neutral formulation to include both the position of theorists who believe that there is a direct language-world relation and that of those who believe it is the language of thought which should be given truth conditions.

No matter what the scenario in which Mary makes her utterance, as long as she uses *even though*, she will always be taken to communicate that there is some kind of incompatibility between the two clauses she uttered. By contrast, if Susan had asked a different question (e.g. "Do you think your relationship with Peter has any future?") Mary wouldn't (necessarily) have been taken to communicate that Peter is bad at buying her presents (instead, the most likely assumption Susan would take her to be communicating would probably be that Mary didn't think that her relationship with Peter had any future). This example demonstrates the difference between 'non-truth-conditional' meaning that arises **semantically**, i.e. on the basis of meaning **linguistically encoded** by a constituent of the sentence uttered, and 'non-truth-conditional' meaning that arises **pragmatically**, i.e. on the basis of particular features of the **context** in which the sentence has been uttered[3]. I cannot emphasise enough that the focus of this chapter and the whole thesis is on the semantic kind of 'non-truth-conditional' meaning.

The next section starts with a brief discussion of what truth conditions are, what kind of entity can have them and how traditional theories of linguistic semantics have used the notion of truth conditions to account for sentence meaning. I then point out a range of problems with this approach, one of which is the existence of 'non-truth-conditional' linguistic meaning mentioned above. Section 1.3, is concerned with a type of theory that aims to give truth conditions to utterances rather than to sentences and, thereby, manages to avoid some of the problems encountered by the type of theory discussed in section 1.2 (though there are many problems faced by both). In section 1.4, I consider the idea that natural language expressions fall into one of two semantic classes: the truth-conditional and the non-truth-conditional. I attempt to define these classes, but on the basis of the conflicting criteria involved I'm forced to conclude that they don't exist. The chapter ends with a list of linguistic devices whose meaning any adequate theory of linguistic semantics should be able to account for, but which have been, or could be, classed as 'non-truth-conditional'.

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[3] In other words, I'm equating **semantics** with linguistically **encoded** meaning and **pragmatics** with meaning that is derived **inferentially**, irrespective of its truth-conditional status. This is the standard relevance-theoretic semantics/pragmatics distinction. For a discussion of how this compares with other approaches to the distinction, see e.g. Carston (1999a).

1.2 Truth conditions and sentences

So far, I have referred to the notion of truth conditions without saying what they are or, indeed, what kind of entity can have them. These two questions are inextricably linked: It seems impossible to say what truth conditions are without also saying something about the sort of thing that bears them. It seems equally impossible to say what sort of an entity can be given truth conditions without also saying something about what truth conditions are. On a very superficial and obvious level, only things that can be true (or false) can have truth conditions. Therefore, I shall first consider what it is for an entity to be true.

An obvious thing that can be true or false is what people say[4]. Intuitively, what somebody says will be true if it corresponds to the way things are in the world. In other words, something can be said to be true if it **represents** the world the way it is. In slightly more technical terms, to give a specification of the truth conditions of a representation is to state what the world would have to be like for the representation to be true. Therefore, a representation has to be truth-evaluable, capable of being either true or false, for it to be able to have truth conditions. This means that many potentially representational entities, like for example single words, cannot be given truth conditions. In fact, the only entities that can reasonably be given truth conditions seem to be propositions, statements, thoughts or sentences[5], i.e. propositional entities: The truth conditions of a given proposition will be the set of necessary and sufficient conditions for its truth. Another way of putting this would be that truth conditions describe states of affairs in the world which have to hold for the proposition to be true. To use Tarski's classic example, the sentence in (2) is true just in case snow is white. In other words, the second half of (3a) gives the truth condition of the sentence/proposition in (2).

(2) Snow is white. (Tarski 1944/1996: 38)

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[4] The way the word *say* is used here is meant to be entirely pre-theoretic.

[5] For the moment, propositions and sentences will be treated as interchangeable. However, as will be made clear below, this is not a view I wish to subscribe to.

(3) a. "Snow is white" is true if and only if snow is white.

b. "Schnee ist weiss" is true if and only if snow is white.

In general terms, the truth condition of a sentence is given by a T-sentence of the form in (4), where *s* is taken to be the name of a sentence and *p* the sentence itself (or a translation of it into a metalanguage). (3b) shows that the metalanguage does not have to be identical to the language of the original sentence.

(4) s is true if and only if p.

As mentioned earlier, there is a generally undisputed intuition that speakers use language to say things **about** the world[6]. Furthermore, the intuition is that, on the whole, we say things we at least think are true[7]. It seems that one of the (if not the) most successful ways in which this 'aboutness' of language can be captured is by means of truth conditions – it is possible to specify what an utterance is about by saying what the world has to be like for it to be true. In other words, there clearly is some kind of relation between language and the world. The question is what exactly this relation is.

Possibly the simplest answer to this question is that there is a direct language-world relation, i.e. it's not just that in using language **speakers** say things about the world, but **language** itself says things about the world. On such a picture, the meaning of a sentence is, in fact, given by a theorem of the form in (4), a view advocated, for example, by Davidson (e.g.1967/1984). On this view, the meaning of individual words and expressions is analysed in terms of the contribution they make to the truth conditions of the sentence containing them. Thus, the meaning of *snow* in (2) would be given in terms of the contribution it makes to the truth conditions of (2) and to the truth conditions of other sentences in which it occurs.

There is a major problem with this, as it stands so far. If the formulation "if and only if" in (4) is taken to be equivalent to the material biconditional of logic, sentences of the form in (4) are true just in case the propositions on either side of the connective have the same truth value. Clearly, this condition is not only fulfilled by (3) but also by (5).

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[6] As will be seen in chapter 3, Ducrot (1993) believes that this intuition is nothing but an illusion.

(5) "Snow is white" is true if and only if grass is green.

Now, while (3) intuitively does say something informative about the meaning of "snow is white", (5) clearly does not. In other words, some extra machinery is needed to make sure sentences are given the 'right' truth conditions.

As Janet Fodor (1977: 36) says, one possibility is to introduce the notion of necessary truth. Thus, the truth conditions of a proposition will not just be a state of affairs that has to hold but a state of affairs that necessarily has to hold for the proposition to be true. In the case of *snow is white*, it seems intuitively clear that it is necessarily true iff snow is white but not iff grass is green. However, there are a range of problems with the theoretical definition of necessary truth.

Davidson (1976/1984) avoids this problem and ensures that T-sentences give the 'right' truth conditions by stressing that they don't just have to be true but law-like and counterfactual supporting (simplistically, not just true given the way things actually are)[8]. In fact, as long as a truth-conditional theory of linguistic semantics is compositional it will also come up with the 'right' truth conditions for each sentence. That is, as long as a theory guarantees that the truth properties of complex expressions are a function of the truth properties of their constituent parts and the way in which they are combined, each sentence will be given the 'right' truth conditions. Indeed, it's impossible to conceive of an adequate theory of linguistic semantics, truth-conditional or not, that doesn't work compositionally. After all, it is a commonplace that any language has an infinite number of possible sentences, all of which can be understood by competent speakers of that language. Therefore, if, as Davidson claims, knowing what a sentence means is knowing its truth condition, it must be possible to compute the truth conditions of a new sentence on the basis of the truth properties of its constituent parts. For instance, a competent speaker of English knows that (6) is true just in case flies eat books because, simplistically, she knows that *flies* refers to flies, *books* refers to books and *x eats y* is true just in case the thing *x* refers to eats the thing *y* refers to.

(6) Flies eat books.

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[7] Note, however that I'm not claiming that speakers adhere to a maxim of truthfulness.

Deriving truth conditions compositionally like this avoids the danger of ending up with T-sentences that assign the 'wrong' truth conditions to sentences.[9]

Apart from the apparent problem of assigning the 'right' truth conditions to sentences, Davidson (1967/1984: 35/6[10]) himself recognises that there are a whole host of elements of meaning that present difficulties for a truth-conditional account of meaning. He mentions elements which present truth-conditional accounts with technical difficulties, such as counterfactual or subjunctive sentences, sentences about probabilities and about causal relations, adverbs, attributive adjectives, mass terms, like for example *snow*, sentences about belief, perception and intention, verbs of action that imply purpose. All of these elements have subsequently been addressed by truth-conditionalists and promising solutions have been found in many cases. However, there are linguistic items that are more worrying for truth-conditional accounts. As Davidson also recognises, there are sentences that don't seem to have truth values at all, for example imperatives, optatives and interrogatives, and therefore cannot be given truth conditions. In addition, there are linguistic expressions, for instance *but* and *after all*, that do have encoded meaning but don't seem to affect the truth conditions of sentences containing them in any way.

The problems discussed so far don't actually threaten the Davidsonian kind of truth-conditional account of linguistic meaning in any fundamental way[11]. At worst, the existence of expressions that don't affect the truth conditions of their host sentences means that this truth-conditional approach to semantics can't account for the meaning of all natural language expressions and needs to be supplemented with a theory of meaning that can handle such expressions. However, there is a fundamental problem with the basic assumption that there is a direct language-world relation, i.e. with the assumption that **sentences** have truth conditions. Put slightly

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[8] Davidson (1984: xiv) makes this point particularly clearly.

[9] A version of such a compositional truth-conditional theory has been integrated into generative grammar with the notion of semantic competence (cf. Higginbotham (e.g. 1988) and Larson & Segal (1995)).

[10] Page numbers refer to Davidson (1984).

[11] As a matter of fact, the problems about to be discussed apply equally to Fregean accounts of linguistic semantics, on which the language-world relation is not entirely direct but mediated by senses. However, it will be seen in chapter 2 that, for Frege, the senses of sentences are truth conditions. Because, as far as the issues central to this thesis are concerned, the predictions made and problems encountered by Fregean and Davidsonian kinds of accounts of linguistic semantics are very similar (if not the same), I will describe both types of accounts as 'truth-conditional' and disregard the differences between them, which are important in other contexts.

differently, it is questionable whether sentences and propositions are actually the same kind of thing.

Of course, if one assumes (as some philosophers seem to do) that sentences are propositions (or, indeed, vice versa) the question is otiose. For most linguists, however, sentences and propositions are two very different kettles of fish. To a linguist, strictly speaking, a sentence is a phono-morpho-syntactic entity – the product of a linguistic system, a mentally generated form usable in a range of ways. Sentence meaning (as opposed to utterance meaning) is the meaning yielded by the sentence's constituents and its structure. Propositions, on the other hand, are more abstract entities, i.e. truth-evaluable representations of states of affairs, which needn't be tied to any linguistic form. For most linguists, sentences, strictly speaking, can't be true or false and therefore can't be given truth conditions. However, the sentence/proposition relationship might be that sentences express propositions. In other words, if one wants to be precise about it, 'the truth conditions of a sentence' should be read as shorthand for 'the truth conditions of the proposition the sentence expresses (or encodes)'.

So far so (relatively) good. The problem with the notion of 'the truth conditions of the proposition the sentence expresses (or encodes)' is that its usefulness rests on the assumption that sentences do express (or encode) propositions. This is, however, a highly doubtful assumption. Sentences, as mentioned above, are 'bits of language' and nothing more. Therefore, any meaning a sentence has should be evident just from the sentence itself, independent of when or whether it is uttered. In other words, if sentences express propositions then it should be possible for competent speakers of the language of a certain sentence to say what proposition it expresses regardless of when and whether the sentence has been uttered. Obviously, for many sentences this is not the case – most obviously, due to the existence of indexicals. Take, for instance, the sentence in (7).

(7) She likes chocolate.

Even the most competent English speaker will not be able to say which of an infinite number of propositions, some of which are given in (8)-(12) below, this sentence expresses. In fact, it seems to be safest to say that this sentence, taken out of context, doesn't express a complete proposition at all.

(8) SUE$_x$ LIKES CHOCOLATE.[12]

(9) MARY$_x$ LIKES CHOCOLATE.

(10) ELIZABETH II LIKES CHOCOLATE.

(11) MARGARET THATCHER LIKES CHOCOLATE.

(12) ZOË BALL LIKES CHOCOLATE.

Even though the sentence in (7) does not itself express a complete proposition, it seems obvious that when it is used in an act of communication, it will express a proposition. In other words, not all sentences may themselves express propositions, but **utterances** of sentences on specific occasions, in specific contexts, do. Therefore, if one wants to use the notion of truth conditions to account for natural language meaning, it seems that the truth conditions one should concentrate on, at least in the case of sentences containing indexicals, are the truth conditions of the proposition expressed by an **utterance** of the sentence, because the sentence itself does not express a complete proposition. This is, in fact, the approach Higginbotham (e.g. 1988), following Burge (1974), takes to solving the problem posed by indexicals.

1.3 Truth conditions and utterances

As mentioned above, although there are a good number of sentences which cannot be given truth conditions, it seems that utterances of sentences can. Higginbotham (1988) uses this insight to give a truth-conditional account of the meaning of sentences that contain indexicals. He concedes that, as (13) shows, it is not possible to give a theorem of the form in (4) that captures the meaning of sentences like (7).

(13) "She likes chocolate" is true if and only if ...?[13]

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[12] Here, and throughout the thesis, the subscripts 'x', 'y', etc., are intended to indicate that the concept in question is one of a specific individual or object. For instance, SUE$_x$ is a concept of a particular person and not just anyone called 'Sue'.

[13] The reader might object that there is the possibility of *"She likes chocolate" is true if and only if some female likes chocolate.* However, quite clearly, it is not enough for the truth of an utterance of

Therefore, instead of attempting to give the truth conditions of context-dependent sentences in terms of statements of the form in (4), Higginbotham (1988: 34) proposes to capture them in conditional terms. For instance, on his picture, the truth conditions of (7) can be given by the statement in (14).

(14) If *x* is referred to by *she* in the course of an utterance of (7), then that utterance is true just in case like (x, chocolate).

This move means that a whole host of context-dependent sentences whose meaning it seemed impossible to capture in terms of truth conditions can now be dealt with without having to abandon the assumption that there is a direct language-world relation in the case of most words. On this picture, it is only context-sensitive expressions, such as indexicals, that don't relate to the world directly but via speaker intentions (or possibly by virtue of certain features of the context). Furthermore, while (14) means that each utterance of the sentence in (7) has different truth conditions, there is still only one theorem, i.e. (14), which quantifies over utterances of (7) and thus makes it possible to determine the truth conditions of this sentence on each occasion of utterance. In what follows, I would briefly like to point out a (relatively minor) problem with Higginbotham's account of the meaning of indexicals before going on to discuss a more far-reaching problem for the enterprise of giving truth conditions to sentences, whether they take the 'classic' form of (4) or the conditional form of (14).

The problem with accounting for the meaning of sentences containing indexicals in terms of (conditional) truth conditions alone is that it puts one in a position where one has to choose between treating all indexicals as synonymous or predicting that utterances in which an indexical is used inappropriately have no truth conditions (and are, therefore, not interpretable?). Let me explain why this is.

If (14) says all there is to say about the meaning of (7), then all indexicals will come out as synonymous. That is, all that has to be done in order to give the truth conditions of (15)-(18) is replace '(7)' in (14) with any of '(15)'-'(18)' and change *she* to *he*, *it*, *you* or *I* as appropriate.

"She likes chocolate" that some female likes chocolate. A more sophisticated version of (i) will be

(15) He likes chocolate.

(16) It likes chocolate.

(17) You like chocolate.

(18) I like chocolate.

This means that *she*, *he*, *it*, *you* and *I* are all predicted to have the same linguistic meaning or, at least, that nothing at all is captured about their individual meaning. Now, although it is indisputable that, in different contexts, all of these indexicals can **refer** to the same individual, I don't believe that anyone would want to claim that they have the same linguistic meaning – they quite clearly don't.

As a matter of fact, Higginbotham (1988: 35) suggests a way of capturing the differences among the above indexicals: Instead of (14) the truth conditions of (7) are now given by (19).

(19) If *x* is referred to by *she* in the course of an utterance of (7), and *x* is female, then that utterance is true just in case like (x, chocolate).

It is clear that this captures the differences, say between *she* and *he*, because the truth conditions of (15), on this kind of picture, would be something like (20).

(20) If *x* is referred to by *he* in the course of an utterance of (15), and *x* is male, then that utterance is true just in case like (x, chocolate).

It is cases in which the second conjunct of the antecedent of the truth condition is not true that present a problem for this account. For instance, imagine Peter and Mary are watching Peter's dog devour an entire bar of chocolate. Smiling at Peter, Mary says emphatically "He likes chocolate". It is clear that, here, Mary refers to Peter's dog, so the first conjunct of the antecedent of the truth condition of Mary's utterance can be completed: *x* is Peter's dog. The problem is that, in our scenario, Peter's dog is actually female, so that the second conjunct of the antecedent is false. This means that the whole antecedent is false, which in turn means that the whole conditional is

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discussed in some detail in 4.6.2.

true regardless of whether the consequent is true or not. In other words, nothing can be concluded about the truth conditions of Mary's utterance. This, however, is counterintuitive. Surely, Mary's utterance is true iff Peter's dog likes chocolate, i.e. in the above scenario Mary's utterance is surely true even if Peter's dog isn't male. Compared with the problem I turn to next, the one just described is relatively minor.

A bigger difficulty stems from the fact that it isn't just obviously context-dependent expressions, such as indexicals, that mean that the linguistically encoded content of sentences doesn't encode or express complete propositions and therefore can't be given truth conditions. Carston (1998, forthcoming b) argues that this semantic (or linguistic) underdeterminacy is an inherent property of natural languages. Apart from the obvious 'culprits', indexicality and ambiguity, there are a whole range of (complete) sentences which nevertheless fail to express (or encode) complete propositions. For instance, not even the most competent speaker of English would be able to specify the truth conditions of any of the sentences in (21)-(25).

(21) Paracetamol is better.
(22) It's the same.
(23) She's leaving.
(24) He is too young.
(25) It is raining.

Carston (1998: 17)

The problem with these examples, as compared to the ones involving indexicals, is that they don't overtly contain any elements to which values have to be assigned before a complete proposition is expressed. For example, in order for (21) to express a complete proposition, a constituent has to be supplied that specifies what Paracetamol is better than. However, there is no indexical or other element in the linguistic surface form of (21) to indicate this. In other words, it is hard to see how one could provide a statement capturing the truth condition of an utterance of this sentence at all. Unlike in the case of (7), for example, there is no *she* (or anything else) that could appear in the antecedent of a conditional truth condition. I can imagine only one way in which one might give a conditional truth condition for a sentence like (21), i.e. the one in (26).

(26) If $x = a$ in the course of an utterance of (21) with logical form *Paracetamol is better than x*, then (21) is true iff better than (Paracetamol, a).

In other words, if one assumes that the underlying logical form of (21) does contain a variable even though the surface form doesn't, examples of this sort could be accounted for reasonably successfully. However, this solution comes at the cost of positing a lot of hidden indexicals at the level of logical form[14].

(26) highlights another problem for truth-conditional theories of linguistic semantics: the truth conditions of utterances, such as (21), don't just depend on some abstract properties of the 'context of utterance' (however exactly one might want to explicate that notion), but they crucially depend on the speaker's intentions. In fact, the same is true of all other indexicals as well (with the possible exception of pure indexicals, such as *I*[15]). Of course, with hidden indexicals the speaker's intentions play an even more crucial role than with others, because they themselves don't encode any information at all about what kind of referent the hearer is to supply. That is, while an indexical like *she* at least indicates that the referent is (or seems to the speaker to be) female, the variable x in the logical form of (21) gives no hint at all about the kind of referent the speaker intended.

In the light of the above discussion it seems fair to say that Higginbotham's approach using conditional truth conditions is capable of capturing all there is to say about sentence meaning, i.e. all there is to say about what is linguistically encoded, in the examples discussed so far[16]. However, once in the territory of utterances rather than sentences, complications given rise to by the involvement of speaker intention are unavoidable. One such complication is that many expressions that standardly contribute to the truth conditions of the utterances in which they occur don't make the same contribution in the case of every single utterance.

For instance, taken out of context, i.e. just looking at its linguistically encoded meaning, it's uncontentious that *bachelor* means 'unmarried adult male'. However, as Carston (1996a) points out, speakers often use expressions to mean

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[14] I believe that for words such as *better* there is a reasonably good case for postulating hidden indexicals. However, Carston (forthcoming a) gives a number of good arguments against the view that the problems posed by sentences that don't express complete propositions can all be solved by postulating hidden indexicals.

[15] See 1.5.1 for a discussion of the notion of pure indexicals.

something more restricted or something looser than their encoded meaning. Consider the scenarios below.

(27) [Susan is desperate to get married and have children.]
Peter: Do you think Susan will come to my party?
Mary: She only goes to places where there are lots of bachelors.

(28) Mary [about Tim who is her husband]: He is such a bachelor.

In (27), Mary clearly isn't talking about just any kind of unmarried adult male – it's highly unlikely that Mary thinks Susan would be thrilled to visit a monastery or a gay club, both of which are more than likely to be teeming with unmarried adult males. The kind of bachelor Mary is talking about here is only a subset of all unmarried adult males, i.e. straight, youngish unmarried males who are willing to get married. In other words, what she means is something more restricted than the linguistically encoded meaning of *bachelor.*

In (28), on the other hand, Mary means at the same time something looser and something richer than 'unmarried adult males' – the extension of *bachelor* is loosened to include Tim, a married adult male, but it is also restricted to exclude non-stereotypical unmarried adult males (e.g. those who are responsible, tidy and considerate). It is not easy to see how the truth conditions of utterances like Mary's in (27) and (28) could be captured. Unlike in the case of (21), it isn't possible to just introduce a variable that will allow one to capture the context dependence of *bachelor.* The only way in which I can imagine one could give the truth conditions of something like Mary's utterance in (27) is shown in (29).

(29) If in an utterance of "She only goes to places where there are lots of bachelors" *she* refers to *x* and the speaker intends *bachelor* to mean *heterosexual, youngish unmarried males who are willing to get married,* then the utterance will be true iff x only goes to places where there are lots of heterosexual, youngish unmarried males who are willing to get married.

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[16] This is charitably leaving aside the problems connected with indexicals, such as *he* and *she,*

Apart from the fact that this is circular, i.e. there is a large chunk of material that is present both on the left hand side and on the right hand side of the conditional, it also fails to do what other conditional T-sentences, e.g. (14), do. While (14) provides a schema on the basis of which one can work out the truth conditions of every utterance of *she likes chocolate*, (29) doesn't do the same thing for utterances of *she only goes to places where there are lots of bachelors.* That is, (29) only provides a means of working out the truth conditions of a very small, specific subset of utterances of the sentence *she only goes to places where there are lots of bachelors.* In other words, while (14) could conceivably capture part of an English speaker's semantic competence, (29) couldn't.

Of course, if sentences could be given truth conditions there would be no need to worry about the way in which speakers use language and one could simply say that sentences like (30) are true iff 'he' is an unmarried adult male[17].

(30) He is a bachelor.

The problem is that, as argued above, sentences can't be given complete determinate truth conditions: the truth conditions of (30) would have to be given in conditional form, e.g. (31).

(31) If *x* is referred to by *he* in the course of an utterance of (30) and *x* is male then that utterance will be true just in case unmarried adult male (x).

The problem with this is that there are many utterances of (30) whose truth conditions aren't adequately captured by (31). Imagine, for instance, that John utters (30) as a follow up to "Susan should meet Jim." in the scenario in (27), or that Mary utters it about Tim in the scenario in (28). I would argue that John's utterance will be true iff something like (32) holds, while Mary's utterance will be true just in case something along the lines of (33) is true.

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discussed above.

[17] Gross (1998) gives a range of examples for which it would be considerably less straightforward to say what contribution they make to the truth conditions of the sentences in which they occur.

(32) Jim is a youngish, heterosexual, unmarried adult male who is willing to get married.

(33) Tim is an untidy, inconsiderate, irresponsible adult male.

Given the considerations above, it seems that the enterprise of capturing the meaning of linguistic devices in terms of the contribution they make to the truth conditions of the sentences or utterances in which they occur can't succeed. Sentences taken out of context can't be assigned complete, determinate truth conditions. Utterances can, but the problem is that the contributions linguistic devices make to the truth conditions of the utterances in which they occur are not stable across contexts[18]. This might lead one to abandon the notion of truth conditions altogether in accounting for sentence or utterance meaning. In fact, ultimately Anscombre & Ducrot's Argumentation Theory, as will be seen in chapter 3, does just that. However, I believe that such a conclusion is only necessary if what one is interested in is what goes on in the actual everyday process of utterance interpretation – which, incidentally, I'm not sure is what Anscombre & Ducrot aim for, and, of course, no truth-conditional semanticist is concerned with this either. If one is after something more abstract – for example, the minimal propositional content of utterances, or their encoded linguistic meaning – one probably needn't worry unduly about phenomena like the context-dependence of non-indexical expressions or the fact that many actual natural language sentences people utter don't encode complete propositions. For a theorist with such aims, it seems perfectly permissible to idealise the picture to a certain extent. It is just that it needs to be recognised that 'truth-conditional' theories of linguistic semantics necessarily do rely on such idealisations and, therefore, their ability to provide insights into the actual process of utterance interpretation is only limited.

In chapter 4, I will show how the 'aboutness' of linguistic utterances mentioned in section 1.2 can be captured within the cognitive pragmatic framework of Relevance Theory, which, while recognising a role for truth conditions, does not attempt to account for linguistic meaning in truth-conditional terms and, therefore, doesn't rely on the kind of idealisation referred to above.

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[18] Gross (1998, chapter 3) considers in detail whether and how truth-conditional theories of semantic competence can account for the pervasive context sensitivity of natural language.

However, it will be seen in chapter 2 that traditional truth-conditional theories offer a wealth of insights into the workings of natural language in spite of the problems just discussed. For one thing, there is good evidence that the notion of truth and truth conditions is a promising (maybe **the** most promising) way of capturing the 'aboutness' of linguistic utterances.

1.4 Truth-conditional 'words'

So far, I have given a great deal of attention to the notion of truth conditions and some of the problems it encounters. What I have not done as yet is say something about the notion of 'truth-conditional' and 'non-truth-conditional' meaning. This is a distinction between types of linguistic meaning that one might be tempted to make on the basis of the observation that most natural language expressions do make a contribution to the truth conditions of the utterances in which they occur, while some don't (e.g., as mentioned above, *but* and *after all*). Even though, standardly, the contribution such expressions make to truth conditions is context-sensitive, they must have some stable core of meaning and, as will be shown in 4.3.2, there is a case to be made for distinguishing two fundamentally different types of linguistic meaning. So, distinguishing between 'truth-conditional' and 'non-truth-conditional' meaning might be a good starting point.

Given that I've argued (hopefully convincingly) that sentences aren't the kind of entity that can be given truth conditions, a linguistic expression could be said to have 'truth-conditional' meaning if it contributes to the truth conditions of the proposition expressed by an utterance of a sentence containing the expression (rather than of the sentence itself). Unfortunately, things are not quite as simple as that for two reasons. The first is that, as mentioned above, not all utterances have truth conditions (recall interrogatives and imperatives) and, therefore, there isn't a single word in the language that always contributes to the truth conditions of the utterance. So, at best, an expression can be said to have 'truth-conditional' meaning if it contributes to the truth conditions of utterances that have truth conditions.

However, an utterance like (34) clearly does have truth conditions, but the word *frankly* doesn't make a contribution to them.

(34) Frankly, I'm bored.

Surely, the truth of (34) depends only on whether the speaker is bored at the time of utterance and not on whether she is being frank in informing the hearer of this state of affairs. Does this mean that *frankly* doesn't have 'truth-conditional' meaning? The answer to this question depends on whether the 'truth-conditional'/'non-truth-conditional' distinction is meant to capture something about the semantics (i.e. the encoded meaning) of an expression or whether it is meant to capture something about the expression's behaviour on a particular occasion of use. In the context of this chapter (and, indeed, the whole thesis) the former seems to be more useful than the latter. If we assume this, then *frankly* surely should be said to have truth-conditional meaning, because there are many cases in which the expression does contribute to the truth conditions of its host utterance (cf. (35)).

(35) Peter spoke frankly.

It seems that a different perspective is needed if we are to make any sense of the truth-conditional/non-truth-conditional distinction. Such a perspective is offered by the following observation. While no linguistic device contributes to the truth conditions of the utterance in which it occurs on all occasions, there are linguistic devices that don't contribute to truth conditions under any circumstances. *But* and *although* are two such examples. Therefore, it seems that we should treat as non-truth-conditional only those expressions that never contribute to the truth conditions of the utterances in which they occur and as truth-conditional all others.

As mentioned above, there is another question that needs a little consideration: It is not immediately clear just exactly what it means for a word or phrase to 'contribute' to the truth conditions of an utterance. Let's assume that (7) is uttered to express the proposition in (8).

(7) She likes chocolate.

(8) SUE_x LIKES CHOCOLATE.

It's uncontentious that the word *chocolate* makes a contribution to the truth conditions of (8). (8) will be true if and only if Sue likes the sweet stuff in the

extension of the word *chocolate*. In other words, the meaning encoded by *chocolate* enters directly into the proposition expressed. It seems that the contribution to truth conditions made by most natural language expressions is equally straightforward. There are, however, some expressions whose 'contribution' to truth conditions is of a different nature.

Pronouns, such as *she* in (7), do seem to 'contribute' in some sense to the truth conditions of the propositions expressed by utterances of sentences containing them. However, the kind of 'contribution' *she* makes is quite different from the contribution of *chocolate* to the truth conditions of an utterance of (7). So, what is this contribution *she* makes?

If (7) is uttered in a context, say one in which it is clear that the speaker is referring to Sue, its truth conditions, i.e. those of (8), will contain, obviously not the pronoun, but its referent, i.e. Sue, in the case of (8). Through its referent, *she* does 'contribute' to the truth conditions of (7). However, it's a widely acknowledged fact that the meaning of *she* is not to be identified with *Sue* or any other possible referent it picks out. It is an equally widely acknowledged fact that pronouns do have linguistic meaning and that the linguistic meaning of *she* could be said to indicate that a suitable female referent is to be part of the proposition expressed. This linguistic meaning of *she* clearly does not appear in a specification of the truth conditions of (8). In that sense, the pronoun *she* does not contribute to the truth conditions of utterances containing it, i.e. unlike *chocolate*, *she* doesn't contribute its encoded linguistic meaning. In other words, it seems more accurate to say that pronouns, like *she*, **constrain** (and in that sense **affect**) the truth-conditional content of utterances containing them by 'pointing' the hearer towards an appropriate referent. Pronouns do not **contribute** their encoded meaning to the truth-conditional content of the sentences containing them. Thus, it could be argued that the linguistic meaning of pronouns is non-truth-conditional.

For truth-conditional (and non-truth-conditional) meaning in general this means that a given linguistic item should be treated as having truth-conditional meaning if it **can contribute its encoded meaning**[19] to the truth conditions of the

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[19] This needs some qualification. The existence of ad hoc concepts (see e.g. Carston 1996/1997) means that even words like *chocolate* don't always contribute **exactly** their encoded meaning to truth conditions of utterances. However, in those cases, at least part of what is encoded appears in the proposition expressed. In the case of a pronoun like *she*, on the other hand, nothing at all of what is linguistically encoded appears in the proposition expressed.

utterance containing it. If it cannot contribute its encoded meaning to the truth conditions of the utterance it will be treated as having non-truth-conditional meaning whether it **constrains** (or **affects**) the truth-conditional content of the utterance or not. This latter distinction will have to be captured at a different level of analysis, which is not likely to be semantic.

In this section I have tried to make sense of a semantic distinction between truth-conditional and non-truth-conditional meaning. In the final section of this chapter, I will look at a range of linguistic phenomena that could be or have been classed as 'non-truth-conditional'. I'm including not only expressions that fulfil the criteria I arrived at above, but also those that other theorists (e.g. Wilson (unpublished)) have referred to as 'non-truth-conditional'. It will transpire that not all of them never contribute their encoded meaning to the truth conditions of the utterances in which they occur. Since I will argue later on that there is no such thing as a clearly defined and explanatorily useful class of semantically 'non-truth-conditional' linguistic devices, it does not seem to matter so much just how that 'class' is defined.

1.5 'Non-truth-conditional' 'words'[20]

1.5.1 Indexicals

(36) He saw her yesterday.

(37) I'll have some of that.

As mentioned above, pronouns and indexicals, like *he, her* and *yesterday* in (36) and *I* in (37), constrain the truth-conditional content of utterances containing them without actually contributing their encoded meaning to it. The same goes for demonstratives, e.g. *that* in (37). The linguistic meaning encoded by these expressions merely constrains the process of reference assignment. Indexicals vary in how much of the 'work' involved in reference assignment is done by their linguistic meaning and how much is left to the hearer to work out inferentially. This

[20] The more intuitive 'words' is being used instead of the more accurate 'linguistic devices' – of course, the discussion includes elements, such as mood indicators, that aren't 'words' by any stretch of the imagination.

is captured by Kaplan's (e.g. 1989) classic distinction between pure indexicals and demonstratives. Given a particular context of use, pure indexicals, e.g. *I*, *here* and *now*, are indexicals whose linguistic meaning does practically all the work needed to assign reference. For instance, all a hearer needs to do to assign reference to an utterance of *I* is determine who is making the utterance. By contrast, in order to assign reference to an utterance of *she* a hearer has to put in a fair amount of inferential work; the linguistic meaning of *she* merely tells him that he is to look for a relevant female referent. Perry (1998) has captured the differences among indexicals in terms of two distinctions. Firstly, he distinguishes between indexicals that call on narrow context (including speaker, addressee, time and place of utterance) for reference assignment and those that call on wider context. Secondly, he distinguishes between indexicals that involve speaker intention for reference and those that don't; he calls the first 'intentional' and the second 'automatic'. In this framework, Kaplan's pure indexicals are seen as automatic and involving narrow context. Perry (1998: 5) points out, though, that *here* and *now* do not clearly fall on the automatic side as they seem to involve speaker intention to determine how big an area *here* is meant to designate and how large a space of time *now* refers to on a given occasion.

Probably because indexicals (and demonstratives) do affect truth conditions, many theorists who have discussed non-truth-conditional meaning have not included pronouns in their accounts of non-truth-conditional meaning[21]. However, for the reasons discussed above I'm including them here.

1.5.2 Non-declarative sentence types

(38) Shut the door.

(39) Do you like chocolate?

It seems to be a universally accepted fact that utterances of sentences like (38) and (39) cannot be given truth conditions at all. Clearly, there is no state of affairs in the world that has to hold in order for (38) or (39) to be true; (38) and (39) are simply

[21] For example Frege, Grice and more recently Wilson (unpublished).

incapable of being either true or false. Commands[22] can't be true or false, they can only be obeyed or disregarded. Similarly, questions can be answered or not, but truth or falsity cannot be attributed to them. However, as has been noted by many theorists, questions and commands clearly have related propositions, which can be given truth conditions[23]. It seems uncontentious that (38) is closely related to a proposition like (40) and (39) to one like (41).

(40) The hearer shuts the door.

(41) The hearer likes chocolate.

An utterance of (38) could be said to communicate (42) and an utterance of (39) (43).

(42) The speaker is requesting the hearer to shut the door.

(43) The speaker is asking whether the hearer likes chocolate.

In fact, it seems unlikely that the meaning of words like *shut*, *door*, *like* and *chocolate*, which are clearly truth-conditional, should be different when these words are used in non-declarative sentences. The element of meaning which doesn't contribute to truth conditions is the non-declarative syntax in the cases of (38) and (39). In a way similar to pronouns, non-declarative syntax doesn't **contribute** to the truth conditions of the utterance. However, non-declarative syntax is different from pronouns in that it doesn't **constrain** truth conditions either, rather it seems to indicate that a given utterance is a question or a command/request and therefore cannot be given truth conditions at all.

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[22] I am using *command* for want of a better word. I am not claiming and do not believe that all uses of imperative sentences constitute acts of commanding.

[23] As far as questions are concerned, this needs some qualification. Only yes-no questions express complete propositions, the propositions Wh-questions express are incomplete.

1.5.3 Illocutionary and attitudinal adverbials

(44) Frankly, Peter is a bore.

(45) Sadly, I can't stand Peter.

(46) Fortunately, Mary was able to repair the car.

(47) Regrettably, Mary was unable to repair the car.

The case of (44) and (45) is slightly different from that of (38) and (39). Utterances of sentences like (44) and (45) can be given truth conditions. However, *frankly* will not figure in the truth conditions of (44), *sadly* will not contribute to those of (45) and the same goes for *fortunately* in (46) and *regrettably* in (47). The truth or falsity of an utterance of (44) will depend only on whether Peter is a bore or not and not on whether the speaker is being frank in saying so. In the same vein, the truth or falsity of an utterance of (45) will depend solely on whether the speaker can stand Peter and not on whether the speaker (or anyone else) is sad about the fact that she can't stand Peter. The same holds, mutatis mutandis, for *fortunately* and *regrettably* in (46) and (47).

There is, however, an interesting difference between *frankly* and *sadly*, on the one hand, and *fortunately* and *regrettably* on the other. As (48) and (49) show, both *frankly* and *sadly* can contribute to the truth conditions of utterances containing them when they function as manner adverbials.

(48) Peter spoke frankly.

(49) Mary smiled sadly.

Interestingly, utterances in which *fortunately* and *regrettably* contribute to the truth conditions of utterances containing them are extremely rare, though not completely non-existent, as (50) and (51) show.

(50) Things turned out most fortunately.

(51) She left regrettably soon after she arrived.

In this, there seems to be a difference between *frankly* and *sadly*, on the one hand, and *fortunately* and *regrettably* and the illocutionary particles discussed below, on the other.

1.5.4 Illocutionary and attitudinal particles[24]

(52) Oh, you're such a bore.

(53) Peter is an interesting man, huh!

(54) You like Peter, eh?

(55) Alas, I can't stand Peter.

Some illocutionary particles, like *eh* and *huh* for example, seem to have an effect similar to that of non-declarative syntax. Thus, *eh* roughly has the effect of turning (54) into a question[25]. Others, for example *oh* and *alas*, function more like illocutionary and attitudinal adverbials. *Alas* has an effect very similar to that of an attitudinal adverbial like *regrettably*, while *oh* seems to be capable of expressing emotions ranging from surprise to contempt.

With the exception of indexicals, all the elements discussed so far have one thing in common, namely the fact that their use results in the construction of a higher-level representation in which the proposition expressed by the utterance is embedded. So, an utterance of an interrogative sentence like (39), repeated as (56) below, can be said to communicate the higher-level representation in (57).

(56) Do you like chocolate?

(57) The speaker is asking the hearer whether he likes chocolate.

Similarly, an utterance of (44), repeated as (58), will communicate (59). However, in addition it will also communicate (60), which corresponds to the truth-conditional content of, or proposition expressed by the utterance.

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[24] It's not entirely clear that these particles are part of the language system at all, i.e. it's not clear that they have any encoded linguistic meaning at all. However, if they do, their meaning is certainly non-truth-conditional and for this reason I'm including them here.

[25] It might not be immediately clear to the reader why I'm putting *huh* together with *eh*. *Huh* seems to indicate that the speaker is being ironic. On the relevance-theoretic account, interrogatives and

(58) Frankly, Peter is a bore.

(59) The speaker is saying frankly that Peter is a bore.

(60) Peter is a bore.

Finally, an utterance of (46), repeated as (61), will communicate (62) and (63).

(61) Fortunately, Mary was able to repair the car.

(62) Mary was able to repair the car.

(63) It is fortunate that Mary was able to repair the car.

This brings out an interesting difference between utterances like (56) and those like (58) and (79) – some explanation will have to be given as to why the latter communicates its proposition expressed while the former doesn't. This question will be discussed in some detail in chapter 4.

1.5.5 'Stylistic differences'

At first sight, the elements listed below might seem to be too diverse to fall under the same heading. The case of *manage* in particular might seem to have little to do with 'stylistic differences'. In fact, I'm not particularly attached to this title and had I been able to think of a better one I would have used that. However, there is something the elements below have in common and for that reason I have grouped them together here. What they have in common is that, unlike the elements discussed in 1.5.2 – 1.5.4, they do not result in a higher-level representation embedding the propositional content of the rest of the utterance. Rather they could be said to result in the construction of an entirely independent proposition, which is not part of the truth-conditional content of the utterance.

The difference between (64a) and (b) is one of the cases Frege looked at.

(64) a. A dog ate my steak.

b. A cur ate my steak.

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irony share an important feature, namely the fact that they are interpretive (or metarepresentational)

It seems very clear that, if they are uttered in the same context, the truth conditions of (64a) will indeed be the same as those of (64b). Whether a speaker utters (64a) or (64b), what she has said will be true if and only if a canine ate her steak. However, the two differ in the speaker's attitude towards the canine. If a speaker utters (64a) her communicated attitude towards the dog can be neutral (at least as far as anyone's attitude can remain neutral towards a creature that has just devoured a prime cut of beef). In (64b), on the other hand, the attitude she communicates is necessarily negative.

(65a) and (b) are truth-conditionally equivalent but, while in (64a) the speaker's communicated attitude towards the dog can be neutral, the speaker's communicated attitude towards the lecture is not neutral in either (65a) or (b). Instead it is negative in the former and positive in the latter.

(65) a. You'll be spared a lecture.
b. You'll be deprived of a lecture.

(66b) is an example very similar to (64b) and (65).

(66) a. Peter ate my steak.
b. That bastard Peter ate my steak.

The truth conditions of (66a) and (b) when uttered in the same context will be exactly the same. Similar to someone uttering (64b), a speaker uttering (66b) will not only communicate that Peter ate her steak but also (and in no uncertain terms) her negative attitude towards Peter.

(67) a. Je t'aime.
b. Je vous aime.
c. Ich liebe dich.
d. Ich liebe sie.
'I love you.'

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uses of language. More will be said about this in chapter 4.

If any of (67a-d) are uttered by the same speaker in the same context, they will be true in exactly the same circumstances. Again, the fact that an utterance of (67a) or (c) implies a greater degree of familiarity between the speaker and the hearer than an utterance of (67b) or (d), is not part of the utterance's truth conditional content.

Similarly, (68a) and (b), if uttered in the same context, will both be true if and only if Peter repaired the car. The fact that (68b) implies that it was difficult for Peter to repair the car does not affect the truth conditions of an utterance of (68b).

(68) a. Peter repaired the car.
b. Peter managed to repair the car.

In (69) and (70), too, there is no truth-conditional difference between (a) and (b). The fact that (69b) implies that one wouldn't have expected John to be there as early as the time of utterance, while (69a) doesn't, is not a matter of the utterances' truth conditions. Analogously, it is no part of the truth conditions of (70b) that Jane is expected to get there.

(69) a. John is here.
b. John is here already.
(70) a. Jane isn't here.
b. Jane isn't here yet.

All the (b) examples above have in common the fact that they make available an implication distinct from the truth-conditional content of the utterance.

1.5.6 Focus particles

The focus particles *even*, *too* and *also* in (71), (72) and (73) below do not make a difference to the truth conditions of their host utterances[26]. All three utterances will be true if and only if John came to the party. These focus particles also seem to communicate assumptions which aren't higher-level representations. However, the

[26] This statement will be qualified in 4.6.7.

assumptions these elements give rise to aren't entirely independent either. It is more that focus particles (as the name would suggest) highlight certain aspects of the utterance and 'comment' on these aspects.

(71) Even John came to the party.
(72) John came to the party too.
(73) John also came to the party.

For example, *even* in (71) seems to suggest that John's coming to the party is less likely than other people coming to the party. *Too* and *also* in (72) and (73), both seem to indicate, depending on what they are taken to focus on, that John wasn't the only person to come to the party, that the party wasn't the only event John came to, or that coming to the party wasn't the only thing John did.

1.5.7 Connectives

The case of connectives as they appear in (74) to (79) seems slightly different again. It is possible that these connectives communicate an independent assumption as well. It is equally possible that they indicate how the truth-conditional content of the clauses or sentences they introduce is connected to the preceding clause or sentence.

(74) Peter is a bore but I like him.
(75) I like Peter although he's a bore.
(76) Peter is a bore. Nevertheless, I like him.
(77) Peter is a bore. However, I like him.
(78) You'll like Peter. After all, you're into bores.
(79) You seem to go for bores. So, you'll like Peter.

Again, what all these connectives have in common is that they do not affect the truth-conditional content of the sentences or clauses they connect. So, for instance, the proposition expressed by an utterance of (74) will be true just in case Peter is a bore and the speaker likes him. The extra assumption, communicated by the use of *but*,

something along the lines of there being a contrast or incompatibility between Peter being a bore and the speaker liking him, is not part of the truth conditions of (74).[27]

In this section, I have given an overview of the different kinds of non-truth-conditional linguistic elements. They have been broadly divided into seven groups: pronouns (and other indexicals), non-declarative sentence types, illocutionary and attitudinal adverbials, illocutionary and attitudinal particles, 'stylistic' differences, focus particles and connectives. The question now is how these elements can be accounted for and whether they can all be accounted for in the same way. The next chapter will look at how theorists who work within essentially truth-conditional semantic frameworks have answered these questions[28].

In chapter 3 I consider Argumentation Theory, which ultimately offers an approach to linguistic meaning that doesn't use the notion of truth conditions at all, at the cost of being able to capture the intuition that utterances are about things. Chapter 4 introduces Relevance Theory, which I will argue can account for 'truth-conditional' and 'non-truth-conditional' linguistic meaning alike, avoiding the problems encountered by traditional truth-conditional theories of linguistic semantics, while still capturing the 'aboutness' intuition. In chapters 5 to 7 I look at the meaning of three particular, 'concessive', 'non-truth-conditional' expressions, *but*, *although* and *even if*, before concluding with some remarks on 'concessive' interpretations and the usefulness of the notion of truth conditions in linguistic semantics in general.

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[27] Bach (e.g. 1994, 1999) would not agree with this. According to him, connectives like those discussed here are part of 'what is said' or the truth-conditional content of the utterances in which they occur. I discuss his view in chapter 2.

[28] Note that not all theorists include all of the elements listed above in their accounts.

CHAPTER 2
'NON-TRUTH-CONDITIONAL' MEANING ACCOMMODATED IN TRUTH-CONDITIONAL FRAMEWORKS

2.1 Introduction

The approaches to linguistic semantics discussed in this chapter have two things in common: They are all ultimately truth-conditional, and they recognise and endeavour to accommodate the existence of 'non-truth-conditional' linguistic meaning of the type encoded by the devices listed at the end of chapter 1. That is, whether the theories are primarily interested in sentence meaning or whether their main interest lies with utterance meaning (i.e. with the meaning sentences acquire when uttered in a context), they all use the notion of truth conditions to account for linguistic meaning. At the same time, all these theories also recognise the limitations of this enterprise and they introduce supplementary theoretical machinery to deal with 'non-truth-conditional' meaning. This is what makes these theories so interesting in the context of this thesis: Even though my ultimate suggestion will be that sentence and utterance meaning can (and should) be accounted for in cognitive terms without employing the notion of truth conditions, the ways in which fundamentally truth-conditional theories of sentence and/or utterance meaning have gone about accommodating the existence of 'non-truth-conditional' meaning in their frameworks provides some useful insights into how one may or may not account for the meaning of such expressions.

I will start by presenting the views of theorists interested in sentence meaning rather than utterance meaning. These are the theorists Strawson (1971: 171) refers to as "theorists of formal semantics". This will include the views of Frege and Kaplan, both of whom are interested in sentence meaning rather than speaker meaning, even though the ways in which they account for it differ greatly. The second part of this chapter will be devoted to theorists more interested in what speakers mean when using sentences. Strawson's (1971: 171) term for these theorists is "theorists of communication-intentions". These are essentially the speech act theorists Austin, Searle, Bach & Harnish, Grice and Bach. I will also look at a variety of

presuppositional approaches, some of which have a formal semantics background and some of which are firmly rooted within theories of communication-intentions. Throughout, attention will be paid to the question whether or not all elements of non-truth-conditional meaning can be given the same treatment and thus whether the linguistic devices listed at the end of the last chapter form a natural class at all.

2.2 Frege: sense, reference, tone and force

> Thus the content of a sentence often goes beyond the thought expressed by it. But the opposite often happens too; the mere wording which can be made permanent by writing or the gramophone, does not suffice for the expression of the thought.
>
> (Frege 1918, in McGuiness 1984: 357/8)

Bearing in mind that for Frege a thought is in fact a truth condition[1], the second sentence of the above quote shows that Frege recognised that, often, the linguistic meaning of a sentence does not yield a fully propositional form, which can be given truth conditions. In fact, this could be seen as Frege's own version of the semantic underdeterminacy thesis. Given that he wanted to see natural language as parallel to logical languages as far as possible and that he attempted to give a strictly compositional account of natural language sentences, it's interesting that Frege recognised the existence of semantic underdeterminacy. However, it is the first sentence of the quote which is of greater interest to the concerns of this chapter. It indicates that Frege also recognised the fact that there are elements of linguistic meaning which cannot be captured in truth-conditional terms. Among others, he mentions the difference between *horse*, *steed*, *nag* and *prad*, the difference between *but* and *and*, words like *fortunately*, *regrettably*, *still* and *already* (McGuiness 1984: 356/7). He also noted that the meaning of non-declarative sentences cannot directly be captured in terms of truth conditions.

It is particularly important when dealing with Frege's treatment of language to keep in mind the fact that Frege was not just a philosopher, but, perhaps first and foremost, a mathematician and logician. In his capacity as a logician and

[1] More will be said about this below.

mathematician, he was only interested in those aspects of language which would be needed for mathematical and logical exposition. Since the logician needs language to capture facts about the validity of arguments, i.e. to show how the truth of the conclusion follows from the truth of the premises, it follows that Frege's main concern was with truth-conditional meaning. However, as Dummett (1981: 83) points out, in his capacity as a philosopher, Frege did not just want to give an analysis of language as it is used for the purposes of logic and mathematics but of the workings of language in general. This led to his recognition that not all linguistic meaning can be captured in truth-conditional terms. The fact that someone like Frege recognised the existence of such meaning, to my mind, indicates just how fundamental it is to natural language. Presumably Frege would have liked natural language to be as close to an ideal logical language as possible. It seems, therefore, poignant that he had to introduce the notions of 'tone' and 'force' to capture those aspects of meaning that escape truth-conditional treatment. The rest of this section will provide an outline of Frege's ideas about meaning, especially his notions of tone and force. It draws heavily on Miller (1998), which gives a very clear overview of the points central to Frege's framework.

Frege's system is strictly compositional. In other words, the reference of a complex expression is determined by the reference of its parts (Miller 1998: 11) and the same goes for the sense of a complex expression (Miller 1998: 29). Compositionality works in two ways. On the one hand, one can start with the sense and reference of a complex expression. One can then say that the sense of a simple expression will be what it contributes to the sense of the complex expression containing it and the reference of the simple expression will be its contribution to the reference of the complex expression. On the other hand, one can start with the sense and reference of simple expressions and build the sense and reference of complex expression out of them. It seems that Frege went the first way, i.e. starting from the sense and reference of sentences, he worked out the sense and reference of proper names, predicates, connectives and quantifiers. Therefore, the notions of sense, reference, tone and force will all first be introduced as they apply to sentences. According to Frege, the **reference** of a sentence is a truth-value. Since **sense** is that

which determines reference, the sense of a sentence is its truth condition, Frege calls this a thought[2].

For Frege, the reference of a proper name is the object it stands for (Miller 1998: 12). The reference of a predicate is a function from objects to truth-values. For instance, the reference of the predicate *is green* is a function which maps green objects onto the value 'true' and all other objects onto 'false'. The reference of a connective is a first-level function from truth-values to truth-values. Thus, the reference of the connective *and* in sentences of the form *P and Q* will be a function which takes one from the values 'true' for *P* and 'true' for *Q* to 'true' for *P and Q*. Finally, the reference of a quantifier is a second-level function from concepts[3] to truth-values (Miller 1998: 18). For example, the reference of the quantifier *all* in *all x are F* (e.g. *everyone is mortal*) will be a function which takes the concept *x is F* as input and yields the value 'true' if every object in the domain of quantification is paired with 'true' in the extension of *F*.

Given this characterisation of the reference of proper names, predicates, connectives and quantifiers, and the fact that sense is seen as that which determines reference, it becomes quite difficult to see how the sense of proper names, predicates, connectives and quantifiers can be characterised. It seems much easier to start by looking at the sense of a sentence, i.e. its truth condition, and to say that the sense of a proper name, a predicate, a connective or a quantifier is its contribution to the truth condition of the sentence. After all, we do seem to have intuitions about the truth conditions of sentences (or utterances of sentences), while it is not so easy to see how we could have direct intuitions about what contribution individual expressions make to the truth conditions of the sentences in which they occur[4]. However, as Frege realised, there are elements of meaning which cannot be captured in terms of sense and reference.

Non-declarative sentences present a first problem for Frege's notions of sense and reference. Clearly a question like (1), does not have a truth-value and therefore it

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[2] As Miller (1998: 33) points out it is important to recognise that Frege's notion of thought is neither subjective nor psychological. On this picture, thoughts are abstract entities.

[3] Note that for Frege a concept is a function whose value is always a truth-value (Miller 1998: 15).

[4] For further discussion of the notion of truth conditions and our intuitions about them see 4.5.2 and 8.2.1.

does not have reference. Since it has no truth-value it cannot have a truth condition, which means it doesn't have sense either.

(1) Do you like chocolate?

According to Miller (1998: 57), Frege gets around this problem by saying that the meaning of a sentence can be given by an ordered pair consisting of the sense of a sentence and an indication of its **force**. Thus, (1) could be rendered as the ordered pair in (2).

(2) <you like chocolate, force of a question>

This ties in with what was mentioned above, namely that there seems to be a general consensus that for every non-declarative sentence there is a related proposition which can be given truth conditions[5]. In other words, the constituent words of a question like (1), for example, do have sense and reference, it is just that the interrogative syntax indicates that the sentence is to be taken with the force of a question.

There is, however, an entirely different kind of meaning, which cannot be captured in terms of sense or reference and, indeed, as the following quote from Frege's *The thought* shows, the notion of force can do nothing towards explaining that kind of meaning.

> An assertoric sentence often contains, over and above a thought and assertion, a third component not covered by the assertion. This is often meant to act on the feelings and mood of the hearer, or to arouse his imagination. Words like 'regrettably' and 'fortunately' belong here.
>
> (Frege 1918, in McGuiness 1984: 356)

A little further on Frege gives some concrete examples of this.

> It makes no difference to the thought whether I use the word 'horse' or 'steed' or 'nag' or 'prad'. The assertoric force does not cover the ways in which these

[5] This certainly seems to be true for yes/no questions. However, as mentioned in chapter 1, in the case of wh-questions, it is more likely that the related proposition is incomplete and can, therefore, not be given a complete truth condition.

> words differ. What is called mood, atmosphere, illumination in a poem, what is portrayed by intonation and rhythm, does not belong to the thought.
>
> Much in language serves to aid the hearer's understanding, for instance emphasizing part of a sentence by stress or word-order. Here let us bear in mind words like 'still' and 'already'. Someone using the sentence 'Alfred has still not come' actually says 'Alfred has not come', and at the same time hints – but only hints – that Alfred's arrival is expected. Nobody can say: since Alfred's arrival is not expected, the sense of the sentence is false. The way that 'but' differs from 'and' is that we use it to intimate that what follows it contrasts with what was to be expected from what preceded it. Such conversational suggestions make no difference to the thought.
>
> (Frege 1918, in McGuiness 1984: 357)

Apart from words like *regrettably* and *fortunately*, stress and word-order, the difference between *horse*, *nag*, *steed* and *prad*, words like *still* and *already* and the difference between *but* and *and*, Frege mentions the difference between passive and active constructions and that between sentences of the form *A gave B to C* and those of the form *C received B from A*. As the following quote from *On sense and reference* shows, *although* is another element which falls into this category.

> Subsidiary clauses beginning with '*although*' also express complete thoughts. This conjunction actually has no sense and does not change the sense of the clause but only illuminates it in peculiar fashion (similarly in the case of '*but*', '*yet*'). We could indeed replace the concessive clause without harm to the truth of the whole by another of the same truth value; but the light in which the clause is placed by the conjunction might then easily appear unsuitable, as if a song with a sad subject were to be sung in a lively fashion.
>
> (Frege 1892, in Geach and Black 1970: 73-4).

All the elements mentioned in this paragraph have what Frege refers to as **tone**, or sometimes 'illumination' or 'colouring'. What is immediately striking about this is how different many of these elements are from each other. While Frege's statement that tone is meant to act on the hearer's mood or feelings or to stimulate his imagination might do the trick if one wants to account for the difference between *horse* and *steed*, or that between *dog* and *cur*, it doesn't seem very appropriate if one wants to account for the meaning of *still* and *already* or the difference between *but* and *and*. Another thing one might notice is that some of the elements Frege discusses do have sense (and reference) plus tone, while others seem to have just tone and no sense (or reference). It is easy to see that *dog* and *cur* will have both sense

and reference, i.e. both expressions will contribute to the truth-conditional content of the sentences containing them. In fact, they both have the same sense and reference. The difference between them, which cannot be captured in truth-conditional terms, lies in their tone. The same goes for *but* and *and*[6], they both make the same contribution to the truth conditions of sentences containing them. Again, the difference between them lies in the tone. By contrast, as (3)-(6) should show, words like *fortunately* and *regrettably*, and *still* and *already* do not contribute to the truth conditions of the sentences that contain them at all. In other words, they have no sense (and no reference). They have only tone and they contribute only to the tone of sentences containing them and not to their sense or reference. This should become clear if one considers an example such as (3).

(3) Fortunately, Mary was able to repair the car.

(4) Regrettably, Mary was unable to repair the car.

(5) Alfred has still not come.

(6) Alfred is already here.

Clearly, the truth or falsity of (3) will depend only on whether Mary was or wasn't able to repair the car and not on whether the speaker thinks this was fortunate or not. Similarly, the truth or falsity of (5) will depend solely on whether Alfred has come. As Frege pointed out, the fact that Alfred is not expected will not be enough to make an utterance of (5) false. It is a matter of **tone** that (5) conveys an assumption that Alfred is, indeed, expected and not one of sense or reference.

There are a number of problems with Frege's notion of tone. Possibly the most serious one is that the notion seems to be little more than a convenient label for a certain type of non-truth-conditional phenomenon. By saying that the elements mentioned above contribute to the tone of a sentence Frege doesn't actually provide an account of their meaning and neither does he say whether, or how, tone is compositional. If tone is to be a theoretically useful notion at all, it needs a good deal of explication. All Frege offers on this front is that he, as Dummett (1981: 85) points out, associates tone with the notion of 'idea'. An 'idea', for Frege, is a subjective

[6] That is certainly true on Frege's account. It will be seen in chapter 5 that not all theorists would

"image" in a person's mind. These images, according to Frege (e.g. in Geach & Black 1970: 60/1), cannot be shared, they are incommunicable in principle. Thus, a certain word might conjure up a certain idea in one hearer's mind and quite a different one in another's. The problem with this is that the difference between *dog* and *cur* clearly lies in the conventional meaning of the two words and it should therefore be, at least more or less, the same for all speakers of English. Frege certainly wants meaning to be objective. Dummett (1981: 85) argues that, even if ideas are subjective (and, therefore, tone is subjective), which is something he doubts, it doesn't follow that they are incommunicable in principle. Dummett's (1981: 88) explanation for Frege's "carelessness" (Dummett's words) in his treatment of tone is lack of interest. As mentioned above, Frege's main concern was with matters of truth and logic. Still, the very fact that Frege recognised that there is linguistic meaning above and beyond that which makes a difference to the truth or falsity of a sentence seems reason enough to include his ideas in this chapter.

The fact that Frege assigns reference, sense, force and tone to sentences gives rise to the following question: In order to know what a sentence means, does one have to know its reference, its senses, its force **and** its tone? Put differently, which of these features constitute sentence meaning? As Dummett (1981: 83/4) points out, Frege does not use an expression to cover the general, intuitive notion of 'meaning'. It seems clear that reference cannot be identified with meaning for the following reason. The reference of a sentence is its truth-value. Thus, all true sentences have the same reference, i.e. 'true', and all false sentences have the reference 'false'. Therefore, if meaning were just reference, all true sentences would have the same meaning, i.e. 'true'. By analogy, all false sentences would have the same meaning, i.e. 'false'. This shows that reference certainly isn't sufficient to determine meaning. In fact, Frege points out that an expression can have a sense without having reference. In other words, a sentence can have a truth condition without having a truth-value.

---

agree.

> The words 'the celestial body most distant from the Earth' have a sense, but it is very doubtful if there is also a thing they mean[7].
>
> (Frege 1892, in Geach & Black 1970: 58)

So, reference is not only not sufficient to determine meaning, it isn't necessary either. This is reflected in Dummett's (1981: 84) view that, if Frege wanted to analyse the general intuitive notion of 'meaning', he would do so in terms of sense, force and tone but not reference.[8]

To summarise this section so far, Frege accounts for the meaning of words and sentences using the notions of sense, force and tone and (indirectly) reference. He appeals to the notion of force to account for non-declarative sentence types. The notion of tone is used in accounting for attitudinal adverbials, such as *fortunately* and *regrettably*, stylistic differences, like that between *horse*, *steed*, *nag* and *prad*, and connectives like *but* and *although*. As far as I am aware, Frege does not discuss illocutionary adverbials or illocutionary and attitudinal particles and focus particles, but it seems fair to say that the notion of tone, if it is theoretically useful at all, could be applied to these phenomena too.

There is one class of expressions listed at the end of chapter 1 that I haven't yet discussed, namely indexicals. These, as Perry (1977/1991: 146) points out, pose a serious problem for Frege's framework. In a nutshell, the problem is this: Indexicals have a linguistic meaning or character that is stable across contexts, but the contribution they make to the truth conditions of the utterances in which they occur changes from context to context. The question is how the stable meaning of indexicals can be captured in Frege's framework. Since sense is that which determines reference and the linguistic meaning of an indexicals helps, to a greater or lesser extent, to determine its reference, one might assume that sense can do duty as the stable meaning of indexicals. However, as Frege sees it, the sense of a sentence is its truth condition and the truth condition of a sentence containing an indexical varies from context to context. Therefore, the contribution an indexical makes to the truth condition of the sentence in which it occurs, i.e. its sense, cannot be its stable meaning. The stable meaning of an indexical has to come in at a level prior to sense,

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[7] It is clear from the German original that *mean* here should be understood as *refer to*.

[8] This seems all the more convincing for the fact that it is very easily possible for someone to know the meaning of a sentence without knowing whether it is true or false.

but Frege's framework does not allow for such a level. The next section is devoted to Kaplan who provides a theoretical framework capable of dealing with indexicals.

2.3 Kaplan: semantics of meaning and semantics of use

Kaplan is probably best known for his treatment of pronouns and demonstratives. It is, therefore, to be expected that Kaplan will have most to say about the elements discussed in 1.5.1. This is certainly true for Kaplan's published work. However, in 1998 Kaplan gave a talk in Paris in which he discussed many of the other elements listed at the end of chapter 1 in terms quite similar to those in which he discussed pronouns and demonstratives in Kaplan (1989). In what follows, I'll give a brief outline of Kaplan's theory of indexicals. I'll then discuss how he extends this theory to cover a wider range of expressions with non-truth-conditional meaning.

Kaplan (1989) accounts for the meaning of indexicals using the notions of character and content. The **character** of an expression is a function that yields the (propositional/truth-conditional) **content** of the expression in a given **context of use**. The content of a whole sentence can then be judged true or false in different possible worlds, or **circumstances of evaluation**. Since, arguably, most natural language expressions, e.g. *saw* in (7), contribute the same propositional component in all contexts of use, for most expressions character and content coincide. However, indexicals are different: The propositional components they contribute vary from context to context. Therefore, the character of an indexical, like *yesterday*[9] in (7), is different from its content in a given context.

(7) He saw her yesterday.

If (7) was uttered on 1 January 2000, *yesterday* would contribute '31 December 1999' to the proposition expressed by the utterance. If it had been uttered on 25 December 1999, its contribution to the proposition expressed would be '24 December 1999'. While the propositional component contributed by *yesterday* (i.e.

[9] *Yesterday* is a member of the special class of 'pure indexicals', briefly discussed in 1.5.1. I'm using

its content) varies across contexts, the rule that yields this content in a given context of use (i.e. its character) remains stable. As any speaker of English knows, *yesterday* refers to the day before the utterance[10]. In this way Kaplan manages to capture the context-dependence of indexicals as well as the idea that indexicals do have some encoded semantic meaning that remains stable across contexts.

So far, it seems that Kaplan would find it difficult to account for most of the other elements discussed at the end of chapter 1: Not many of them contribute to the proposition expressed by their host utterances. So, not many of them could be seen as having content at all. As a matter of fact, even for those expressions that do make a truth-conditional contribution, for instance *cur* in (8), there is an element of meaning (e.g. the speaker's negative attitude towards the dog) that seems to be lost on Kaplan's early picture, because it isn't part of the truth-conditional content of the utterance.

(8) A cur ate my steak.

However, Kaplan (1998) deals with examples like (9), (10), (11) and (12), as well as with the expressions *goodbye*, *ouch* and *oops*.

(9) That bastard Peter ate my steak.

(10) a. Je t'aime.

b. Je vous aime.

(11) Peter is a bore but I like him.

(12) I like Peter although he is a bore.

The idea is that these expressions share with indexicals the property that they should be given a **Semantics of Use** rather than (or as well as) a **Semantics of Meanings**. Contrary to received opinion in formal semantics, Kaplan (1998) argues that

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yesterday as an example for simplicity's sake.

[10] As with all so-called pure indexicals, this isn't true of absolutely every use of *yesterday*. In direct quotations and figurative uses, for instance, the indexical can refer to a day (or even a longer period) other than the day before the utterance, cf. (i) and (ii).

(i) A: What did Mary say last Sunday?
B: She said: "I drank far too much yesterday".

(ii) Yesterday, all my troubles seemed so far away.

expressions like those mentioned above should be treated within its framework, because their presence or absence makes a difference to the validity of arguments. To support this view, he gives two examples similar to (13) and (14).

(13) That bastard Peter ate my steak.

Peter ate my steak.

(14) Peter ate my steak.

That bastard Peter ate my steak.

Kaplan's intuitions are that the argument in (13) is valid while that in (14) isn't. Obviously, if the validity of these two arguments depended solely on the preservation of truth, as it is normally understood, they should both be valid.

To account for examples like these, Kaplan introduces the notions of **descriptive content** and **expressive content**. According to him, an expression has descriptive content if it **describes** something that is or isn't the case, while an expression has expressive content if it **expresses** (or displays) something that is or isn't the case. Descriptive content seems to correspond to truth-conditional or propositional content, expressive content doesn't. Descriptive content is representational, expressive content isn't. Kaplan illustrates the difference between expressing and describing in the following way: If someone screams, they display or express fear, if they say *I'm in fear* they describe it. While the distinction between expressing and describing is intuitively clear, there is a noticeable lack of theoretical definition of the two notions.

Parallel to the notions of descriptive and expressive content, Kaplan introduces the notions of **descriptive correctness** and **expressive correctness**. An expression is descriptively correct if what it describes is the case, an expression is expressively correct if what it expresses is the case. Let's return to the arguments in (13) and (14). According to Kaplan, *that bastard* expresses derogation. Thus, the premise in (13), *That bastard Peter ate my steak*, is expressively correct iff the speaker has a derogatory attitude towards Peter. It will be descriptively correct iff Peter ate the speaker's steak.

Now Kaplan can capture the difference between the argument in (13) and that in (14). The premise in (13) has descriptive and expressive content, the conclusion

only descriptive content. In (14), on the other hand, the premise has only descriptive content and the conclusion has additional expressive content not present in the premise. Clearly, on the traditional conception of logical validity, where an argument is valid if it is truth-preserving, this difference between (13) and (14) doesn't explain why the former should be valid but not the latter. If Kaplan wants to preserve his intuitions concerning the validity of these arguments he must redefine either logical validity or truth.

Kaplan first pursues the first option. On his new definition, an argument will be valid, not if it preserves truth, but if it observes 'information delimitation'. In other words, an argument is valid iff the conclusion doesn't contain any semantic information that isn't already contained in the premise. On this definition, (13) is a valid argument because its conclusion doesn't contain any information that isn't already present in the premise. (14) isn't valid because there is expressive content in its conclusion that isn't there in the premise.

Kaplan also considers the second option where the notion of truth gets a broader definition. On this broader definition a sentence will be true if and only if it is not only descriptively correct, but also expressively correct. Kaplan calls this 'truth-plus'. If this course of action is adopted, logical validity can still be defined in terms of truth-preservation, it's just that the 'truth' in question is truth-plus. This redefinition, too, captures Kaplan's intuitions regarding the validity of (13) and the non-validity of (14). (13) is valid because the expressive and descriptive correctness of the premise guarantees the descriptive correctness of the conclusion. (14) is not valid because the descriptive correctness of the premise is not enough to guarantee the descriptive and expressive correctness of the conclusion[11].

On the whole, Kaplan's introduction of the notion of expressive content can be seen as a recognition of the generally accepted fact that not all semantic meaning can be treated in truth-conditional terms. However, Kaplan's eagerness to use the tools of logic to capture non-truth-conditional meaning is slightly more contentious. It is obvious that the paper Kaplan presented in Paris is programmatic in nature and, apart from the fact that the expressing/describing distinction is only explicated in

[11] Kaplan doesn't say which of these two options he prefers. Personally, I find the first slightly more appealing than the second, because it leaves the possibility of distinguishing two kinds of validity: logical (defined in terms of truth) and expressive (defined in terms of information delimitation).

intuitive terms, there are a number of questions it doesn't answer. Possibly the most pressing one of these is: How do the notions of descriptive and expressive content fit in with Kaplan's earlier notions of character and content? The one thing that seems clear is that 'content' in Kaplan's earlier work corresponds to 'descriptive content' in Kaplan (1998). It seems equally clear that character cannot correspond to descriptive content, because it is on a different, prior, level (recall that it is that which determines descriptive content). Furthermore, it can't correspond to expressive content either because that surely has to be situated on the same level as descriptive content, namely at the level at which the sentence is evaluated for descriptive or expressive correctness. The question, then, is whether there is such a thing as 'expressive character', since, presumably, the notion of 'character' that leads to descriptive content is still needed to account for the meaning of indexicals. If there is such a thing as expressive character, what is its role? It is conceivable that if the character of an indexical is a rule of use, the character of an expressive could be a rule of use too. Thus, the character of *yesterday* could be something like 'use to refer to the day before the day of utterance' and that of *bastard* something like 'use if you want to express a derogatory attitude towards the object'. If this is right one could say that the domain of Kaplan's Semantics of Use was character and, possibly, expressive content, while the domain of his Semantics of Meanings would be descriptive content. However, there is still the question of what expressive content would look like or, indeed, how expressive character would determine expressive content in a given context of use.

It seems that, potentially, Kaplan's Semantics of Use could account for the majority of the expressions listed at the end of chapter 1.[12] At this stage, however, it's not clear exactly how it could do that. Nevertheless, compared with Frege's treatment of non-truth-conditional meaning, Kaplan's approach goes a reasonably long way towards providing a framework (or the beginnings of one) capable of accounting for all sorts of non-truth-conditional devices.

[12] With the possible exception of non-declarative sentence types, which Kaplan doesn't discuss.

2.4 Presuppositional approaches

It might not be immediately clear how the notion of presupposition is connected with non-truth-conditional meaning. However, there are many ways in which 'presupposition' can be and has been construed and on some of these construals the notion can be used to account for some, if not all, of the phenomena listed in 1.5. I will here briefly look at some ways in which the notion of presuppositions has been defined by linguists and philosophers and how (or whether) the different notions of presupposition can be used to account for expressions with non-truth-conditional meaning.

The first definition of presupposition I'd like to look at is the classical **semantic**, or **logical**, one. On this view, presupposition is a special sub-class of entailment.[13] Wilson (1975: 16) gives the following definition of logical presupposition:

> A sentence S presupposes another sentence P iff if S is true P must be true, and if not-S is true P must be true, and if P is false or lacks a truth-value both S and not-S must lack a truth-value.

(15) and (16) are examples that have often been used to illustrate this kind of presupposition: If (15) is true (17) must be true, if its negation, (16), is true (17) must be true and if (17) is false, it has been claimed, (15) and (16) lack a truth-value.

(15) Peter has stopped smoking.

(16) Peter hasn't stopped smoking.

(17) Peter has been a smoker.

Clearly, on this view, presuppositions are quite distinct from non-truth-conditional meaning. For instance, intuitively (18b) might be seen as carrying a presupposition like the one in (19).

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[13] Stalnaker (1974/1991) would not agree with this. According to him (1974/1991: 475), "On the semantic account, presupposition and entailment are parallel and incompatible semantic relations. A presupposes that B if and only if B is necessitated by both A and its denial. A entails B if and only if B is necessitated by A but *not* by its denial." (Stalnaker's emphasis). On this view, entailment and presupposition are mutually exclusive.

(18) a. Peter repaired the car.

b. Peter managed to repair the car.

(19) Repairing the car was difficult for Peter.

This seems all the more convincing for the fact that (20), the negation of (18b), also carries a suggestion along the lines of (19).

(20) Peter didn't manage to repair the car.

However, (19) can't be a logical presupposition of either (18b) or (20) because it's entailed by neither of those utterances. As mentioned at the end of chapter 1, (18b) is true iff (18a) is true – any assumptions concerning the difficulty of repairing the car don't enter into a truth-conditional characterisation of (18b). Someone who utters (18b) in a context where (19) is not true could not be accused of lying. At most, that person could be accused of inappropriately uttering (18b) or, possibly, misleading her audience. For the same reason, none of the other expressions in 1.5 can be accounted for in terms of logical presupposition. On a different construal of presupposition, however, the notion can be used to account for such expressions.

Stalnaker (1974/1991) argues for a **pragmatic** notion of presupposition. According to him, presupposing is not something a sentence or proposition does, but something that speakers do. On this reading, a presupposition is an assumption taken for granted by the speaker (and assumed to be taken for granted by the hearer as well). Stalnaker (1974/1991: 473) gives the following tentative characterisation of pragmatic presupposition:

> A proposition *P* is a pragmatic presupposition of a speaker in a given context just in case the speaker assumes or believes that *P*, assumes or believes that his addressee assumes or believes that *P*, and assumes or believes that his addressee recognizes that he is making these assumptions.

Stalnaker points out that this characterisation shouldn't be seen as a definition of pragmatic presuppositions because it's not clear what it is to assume or believe

something in the relevant sense and even if it were, the definition would need further qualification, since a speaker can presuppose things that are not known to the hearer and not presuppose things that are known to both speaker and hearer. Nevertheless, Stalnaker contends that the notion of shared background knowledge can be used to account for presuppositional phenomena. According to him (1974/1991: 475), presuppositions as shared background assumptions can arise in at least two ways. The first of these is semantic in the sense that it is the conventional (or encoded) meaning of the words that necessitates the assumption that a speaker in a given context is making a certain presupposition. For example, it seems to be a semantic property of the verb *manage* in sentences of the form *X managed to V* that it can only be uttered appropriately in contexts where it is assumed by the speaker that the hearer assumes that the speaker assumes, and so on, that it is difficult for *X* to *V*. Thus, the sentence in (18b) can only be appropriately uttered in contexts where it is assumed by speaker and hearer that it was difficult for Peter to repair the car. A speaker choosing to use the verb *manage* in a given utterance in a given context can only appropriately utter a sentence like the one in (18b) if she presupposes that it was difficult for Peter to repair the car.

The second way in which a pragmatic presupposition can arise is entirely pragmatic. In other words, it is possible that sometimes a presupposition arises simply because it would not make sense for a rational speaker to utter a sentence expressing proposition *P* if she wasn't presupposing *Q*. Stalnaker (1974/1991: 476) discusses the example of *know* in sentences of the form *X knows that P*. He believes that the fact that in most cases where a speaker utters a sentence of this form she will be taken to be presupposing *P* can be explained without claiming that there's some presuppositional constraint built into the semantics of the verb *know*. He argues as follows. If a speaker were to utter *X knows that P* in a context where the truth of *P* was in doubt or dispute, she would be saying something that could be challenged on two counts. It would be unclear whether her main point was to make a claim about the truth of *P* or to make a claim about the state of *X*'s knowledge. In other words, the speaker would be leaving it unclear where she wanted the conversation to be going. Therefore, given what *X knows that P* means and the fact that "people normally want to communicate in an orderly way, and normally have some purpose in mind" (Stalnaker 1974/1991: 476), it would generally be unreasonable for a

speaker to utter *X knows that P* in a context where the truth of *P* isn't established. In such a context, the speaker could communicate more efficiently by making a different utterance. Obviously, if any of the examples in 1.5 are to be treated in pragmatic presuppositional terms, the presuppositions should be seen as arising in the first way, i.e. as a result of a semantic property of the expressions discussed.

Like Stalnaker, Recanati (1998: 626-627), too, is not convinced by the logical notion of presupposition. He finds it more appealing to assume that presuppositions are part of conventional (i.e. encoded) meaning of an utterance without entering into its truth conditions. For Recanati, presuppositions, like the one associated with the verb *stop* in (15) and (16), should be construed as "conditions of use or constraints on the context". In other words, the verb *stop* is seen as encoding the information that the context should contain a certain proposition, i.e. (17) in the case of (15) and (16). The claim is then that an utterance of (15) or (16) will only be appropriate in a context where (17) is available.

Unlike the logical notion of presupposition, the contextual constraint notion can easily be applied to a case like *manage* along the lines described above. However, the notion of contextual constraint needs some clarification. For instance, does a discourse adverbial like *fortunately* in (21) constrain the context? One could argue that an utterance of (21) is appropriate only in contexts in which (22) is available and, thus, that *fortunately* encodes a contextual constraint.

(21) Fortunately, Mary was able to repair the car.

(22) The speaker is happy about something.

This shows that if the notion of presupposition is seen as nothing other than a constraint on context, a whole range of phenomena that have not traditionally been accounted for in presuppositional terms can be seen as carrying presuppositions. Many of these phenomena, however, do not intuitively seem presuppositional. For instance, while most people will grant that an utterance of (23) presupposes (24), no one seems to believe that (21) presupposes (22).

(23) The king of France is bald.

(24) There is a king of France.

Depending on the definition of the notion of contextual constraint, practically all the expressions listed in 1.5 could be said to carry presuppositions in Recanati's sense. However, it's unclear what would be gained by treating many of them in presuppositional terms, since the information they convey does not have to be part of shared background knowledge. If the notion of presupposition is equated with that of constraint on context it loses its intuitive appeal. It seems to me that the question of presupposition and that of non-truth-conditional semantics are completely distinct. If one wants a notion of presupposition that captures intuitions, an account like Stalnaker's seems most promising, but it will not deliver at the same time an account of non-truth-conditional meaning. That is something that might well be done using the notion of contextual constraint, but not before it has been given more substance than Recanati seems to do.

2.5 Speech-act theory

2.5.1 Introduction

Unlike Frege and other theorists of formal semantics, speech-act theorists are primarily interested in natural language as it is used in everyday communication. In fact, it was against theorists like Frege and his followers, who were firmly rooted in the tradition of formal logic and were trying to give a formal account of language, that speech-act theorists were reacting. Where Frege was concerned with sentence meaning, speech act theorists were interested in speaker meaning. In other words, for them, the most interesting question is not 'what does the sentence mean?' but 'what did the speaker mean by uttering the sentence?'. Probably the most famous speech act theorists are Austin, Searle and Grice. In what follows, I will start with the speech act theory of Austin and Searle and its developments in the hands of Bach & Harnish and Recanati, who seem to have most to say about the meaning of non-declarative sentence types and illocutionary and attitudinal adverbials. The section following that is concerned with Grice's own version of speech act theory which has more to say about the meaning of certain non-truth-conditional connectives. Finally,

a small section is devoted to Bach's more recent criticism of Grice's approach to non-truth-conditional connectives.

2.5.2 Austin and Searle: the locutionary and the illocutionary

In *How To Do Things With Words*, Austin (1962:1) starts with the observation that language can be used for many more things than the making of statements that are either true or false. This leads him to look at a class of verbs, i.e. performative verbs, which he believes are not used to make statements (at least not when used in a certain way in the first person singular) but, as the name suggests, to perform actions. An example of this is *I warn you* in (25).

(25) I warn you that there's a bull in that field.

The investigation of the actions we perform when we produce utterances containing performative verbs then led Austin to consider what sorts of actions we perform when producing utterances in general. This resulted in the, by now classic, distinction between locutionary, illocutionary and perlocutionary acts, all of which can be (and are) performed in producing utterances (Austin 1962: 95-101).

The **locutionary** act is the act **of** saying something. Austin (1962: 92-98) further analyses the locutionary act as being constituted by phonetic, phatic and rhetic acts. The phonetic act is the act of uttering certain noises, the phatic act is the act of uttering certain words in a certain construction, i.e. the uttering of certain noises that are part of the grammar of a certain language, and, finally, the rhetic act consists in uttering the words of a certain language in a certain construction with a definite meaning (which Austin construes as 'sense' and 'reference'). Another way of characterising locutionary acts, would be to say that they are the uttering of a sentence with a certain locutionary meaning. It seems that Austin would want to say that the locutionary meaning of an utterance of (25) would be something along the lines of (26).

(26) There's a bull in field$_x$.[14]

This seems problematic because *I warn you that* certainly must be part of the phonetic and phatic acts performed in an utterance of (25), i.e. part of the noise made and also part of the words that are uttered in a certain construction. The only thing Austin might want to deny is that *I warn you that* forms part of the rhetic act, i.e. he might want to deny that these words are uttered with a particular sense and reference in this kind of context. However, this is only possible if 'sense' and 'reference' are understood in the Fregean way, i.e. as pertaining to the truth condition of the utterance. Even then, though, Austin would have to show that *I warn you that* does not contribute to the truth condition of (25). Quite apart from the worry just voiced, Austin's characterisation of locutionary meaning is not entirely clear and it has been interpreted in different ways by different theorists. This will be discussed in some detail below. For the time being, I will let it stand as it is and move on to the notion of illocutionary act.

The **illocutionary** act is the act performed **in** saying something (Austin 1962: 99). Put differently, it is the act of uttering a sentence with a certain illocutionary force. In general, whenever someone performs a locutionary act, they also perform an illocutionary act (though not necessarily the illocutionary act indicated in the locutionary act[15]). In the case of (25), the illocutionary act performed is an act of warning. In other words, the sentence is uttered with the illocutionary force of a warning. Note that this illocutionary force does not have to be explicitly indicated by a performative verb. For example, an utterance of (25) without *I warn you that* could still be used to perform an act of warning. Finally, **perlocutionary** acts are the acts performed **by** saying something, i.e. the act that affects the hearer's feelings, thoughts or actions (Austin 1962: 101). (25) could, for example, be used to perform the perlocutionary act of frightening the hearer.

As mentioned above, there is some debate concerning what Austin intended to fall under the notion of locutionary act. Put slightly differently, there is a question mark around what exactly constitutes the locutionary meaning of a sentence, on the one hand, and what makes up the illocutionary force of an utterance, on the other.

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[14] The subscript *x* is meant to indicate that a specific field is being referred to.

This question is particularly important in the context of this chapter, because it is expressions with non-truth-conditional linguistic meaning that seem to bring out the problems with Austin's distinction between locutionary and illocutionary acts most clearly. These problems are the following.

Broadly, there seem to be two ways of construing locutionary meaning (with some intermediate possibilities). The first way is to equate the locutionary meaning of a sentence with its linguistic meaning, i.e. with what is encoded, plus reference assignment and disambiguation[16]. The second way is to equate locutionary meaning with propositional content, i.e. the truth conditions of the sentence on an occasion of utterance. The intermediate possibilities all seem to amount, one way or another, to equating locutionary meaning with propositional content plus some, but not all, non-truth-conditional linguistic meaning. Austin seems to believe that explicit performatives, such as *I warn you* in (25), are not part of locutionary meaning. However, *I warn you* is clearly part of the linguistic meaning of (25). This indicates that he did not intend locutionary meaning to be construed the first way. Apart from explicit performatives, like *I warn you*, the problematic elements are mood indicators, such as the non-declarative syntax in (27) and (28), illocutionary adverbials, such as *frankly* in (29), and possibly also the meaning encoded by the illocutionary particle *eh* in (30).

(27) Shut the door.

(28) Do you like chocolate?

(29) Frankly, Peter is a bore.

(30) You like Peter, eh?

Like *I warn you*, all of these expressions have linguistic meaning (with the possible exception of *eh*), i.e. they encode something, but it seems that the information they encode is more illocutionary than locutionary. That is, the imperative syntax in (27) could be linked with the illocutionary act of telling to, ordering, suggesting, etc. The interrogative mood of (28) seems to indicate that the utterance is to be taken with the

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[15] See Recanati (1987: 258-260).

[16] NB. This is meant to amount to (encoded and inferred) truth-conditional content plus encoded non-truth-conditional content (cf. Recanati 1987: 248).

force of a question. *Frankly* in (29) might indicate that the speaker is performing an act of confessing or admitting something (or, at least, of speaking frankly). And finally, *eh* in (30) seems to have an effect similar to the interrogative mood in (27).

As mentioned above, different theorists have interpreted Austin in different ways or, in some cases, drawn their own distinctions. Searle (1968/1973), for example, interprets Austin as intending one of the intermediate possibilities. According to Searle, Austin's locutionary meaning includes all truth-conditional but only some non-truth-conditional linguistic meaning. Searle bases this interpretation on a quote from Austin (1962: 95), in which he gives the following examples of reports of phatic and rhetic acts: 'He said "I shall be there"' (reports phatic act), 'He said that he would be there' (reports rhetic act); 'He said "Get out"' (phatic), 'He told me to get out' (rhetic); 'He said "Is it in Oxford or Cambridge?"' (phatic), 'He asked whether it was in Oxford or Cambridge' (rhetic). From these examples, it seems that one could conclude that Austin intended locutionary meaning to amount to propositional content plus an indication of generic illocutionary force, i.e. saying, telling and asking. If this is how Austin intended locutionary meaning to be defined, Searle argues, the distinction between locutionary and illocutionary acts collapses. Here is his argument.

Searle (1968/1973: 147) points out that the above reports of the rhetic act (and thus the locutionary act) already contain the illocutionary verbs *say*, *tell* and *ask*. Now, Searle grants that these are generic illocutionary verbs, but, he maintains, they are still illocutionary verbs. The fact that Austin has used these verbs in characterising locutionary acts, means that he has, inadvertently, characterised locutionary acts as illocutionary acts and, therefore, that the distinction between the two has collapsed.

Instead of Austin's notion of locutionary act, Searle (1968/1973: 155) introduces the notion of **propositional** act, i.e. the act of expressing an illocutionary force-neutral proposition. This, according to Searle, captures the difference between the **force** of an utterance and its **content**. To sum up, Searle (1968/1973) distinguishes between the following acts performed when uttering a sentence: the phonetic act, the phatic act, the propositional act and the illocutionary act. On this picture, it seems that all the elements discussed in 1.5, with the exception of indexicals, will have to be accounted for in terms of illocutionary force, since none of

them make any contribution to the proposition expressed. As mentioned above, for non-declarative sentences, illocutionary adverbials and particles this might not be problematic, but it is hard to see how attitudinal adverbs and particles, the stylistic differences communicated by some expressions (e.g. *dog* vs. *cur*) and discourse connectives (e.g. *but* and *although*) could be accounted for in terms of illocutionary force. In short, Searle's taxonomy leaves some elements of linguistic meaning unaccounted for.

Strawson (1973) considers roughly the same evidence as Searle (1968/1973) but reaches slightly different conclusions. Strawson (1973: 50-56) looks at three possible interpretations of locutionary meaning in turn. His first interpretation is identical to the first one mentioned above, namely that locutionary meaning amounts to all linguistic meaning plus reference assignment and disambiguation. Strawson (1973: 52) concludes that this could not be what Austin had in mind, because Austin (1962: 73-76) lists a number of elements with linguistic meaning, such as mood, stress, adverbs and connectives, saying of them that they make clearer the force of the utterance and that their role could be taken over by explicit performatives (though not without "change or loss", as Austin (1962: 73) puts it). Since these elements are seen as making clear the illocutionary force of the utterance and not making more precise the meaning of the sentence, they cannot be part of the locutionary meaning of the sentence and locutionary meaning must be less than linguistic meaning.

The second interpretation Strawson examines is the same as the second one mentioned above. On this interpretation, locutionary meaning amounts to no more and no less than the truth-conditional content of the sentence as uttered on a certain occasion. Strawson (1973: 54) comes to the conclusion that this is not likely to be the intended interpretation either, because the way in which the locutionary meaning is assessed (as being true or false) depends on what it is that is being assessed, i.e. whether it is a statement or advice, for example. This leads to the third interpretation which Strawson considers and adopts.

Like the interpretation Searle (1968/1973) went for, Strawson's third interpretation is what has been referred to above as an intermediate possibility. Strawson also concludes from the way in which Austin (1962: 95) characterises the rhetic act that for Austin it must involve more than just specifying sense and reference. Therefore, he argues, locutionary meaning should include a rough

classification of what is said into 'declarative', 'imperative', 'interrogative' and, as Strawson (1973: 55) puts it "perhaps one or two more". Unlike Searle (1968/1973), Strawson does not find this idea problematic. In fact, he proposes a schema of interpretation based on it (1973: 60). In this schema, given in (31), locutionary meaning and illocutionary force are specified separately. The locutionary meaning of declaratives is the proposition expressed and that of imperatives is, in Strawson's (1973: 60) words, the "imperative expressed". Strawson adds that, for the other general classes of what is said, terms parallel to 'proposition expressed' and 'imperative expressed' will have to be introduced, but he does not suggest what they could be.

(31)

X issues the { (1) proposition (*that* S *is* P) / (2) imperative (*that* Z (person) *is to* Y (act)) / (3) ? }

as a/ with the force of a/ by way of { (1) accusation, report, forecast, conclusion, objection, hypothesis, guess, verdict, etc. / (2) command, request, piece of advice, prayer, invitation, entreaty, etc. / (3) ? }

(Strawson 1973: 60)

On this interpretation of the locutionary/illocutionary distinction, just as on Searle's (1968/1973) interpretation, most of the elements listed at the end of chapter 1 would have to be accounted for in terms of illocutionary meaning. The interesting difference between Searle and Strawson, though, is that while for the former non-declarative syntax is treated as determining illocutionary force, it looks as though for the latter it determines what kind of locutionary meaning one is dealing with, i.e. whether the locutionary meaning is a proposition, an imperative or something else. Presumably, this approach would be better equipped to explain why statements have truth conditions but questions and requests don't.

Bach & Harnish (1979) seem to have a conception of locutionary meaning very similar to Strawson's (1973). They characterise locutionary acts in terms of what is said, a notion which has itself been given many different interpretations, for example, most famously, by Grice and more recently by Bach as discussed in the

next two sections. Corresponding to sentence mood, they distinguish different kinds of saying. Thus, according to Bach & Harnish (1979: 25), the locutionary act S performs in uttering a declarative sentence amounts to (32) and that performed in the utterance of an imperative to (33). For interrogatives, there are two possibilities: in the case of a yes/no-interrogative it is (34a) and it is (34b) in that of a wh-interrogative ('wh-x' stands for the unknown component of P).

(32) S is saying that it is the case that P.

(33) S is saying that H is to make it the case that P.

(34) (a) S is asking (or saying that H is to tell S) whether or not it is the case that P.

(b) S is asking (or saying that H is to tell S) (wh-x P).

In fact, Bach & Harnish's characterisation of imperatives and interrogatives encounters some serious difficulties. These will be discussed in chapter 4, where I will advocate an alternative account proposed by Wilson & Sperber (1988).

Recanati's construal of the notion of locutionary act is subtly different from all of those discussed so far. Although Recanati agrees with Strawson and Searle that Austin is likely to intend at least some indication of the type of speech act performed to be part of locutionary meaning, he does not conclude from this that the locutionary/illocutionary distinction collapses. Recanati (1987: 258-260) stresses the difference between actual illocutionary acts and indicated illocutionary acts. According to him, indicated illocutionary acts are the result of linguistic meaning which encodes information about illocutionary force rather than content[17]. For Recanati, locutionary meaning amounts to the propositional content of the utterance with all linguistic meaning (including indicated, or 'non-truth-conditional', linguistic meaning). It is Recanati's argument that indicated illocutionary acts are not the same as actual illocutionary acts and that, therefore, locutionary and illocutionary acts are not the same. Recanati's basis for this distinction is the fact, that no matter how precisely the linguistic meaning of a sentence indicates the illocutionary force with

[17] It is important to note at this point that Recanati (1987) does not regard explicit performatives as force-indicating devices in this sense According to Recanati (1987), utterances of sentences containing explicit performatives are only indirectly performances of the illocutionary acts described

which it is to be taken, on every occasion on which the sentence is uttered the hearer still has to determine whether the speaker actually intended to utter the sentence with that force. For instance, a speaker might utter (28), whose linguistic meaning clearly indicates that it is to be taken as a question[18]. However, the speaker might be an actress who is just saying her lines and doesn't intend it to be a question at all. Another possibility is that the speaker is aping somebody and the illocutionary act she actually performs is not one of asking a question but one of mocking the hearer (if that, indeed, is an illocutionary act...).

(28) Do you like chocolate?

However this may be, the point Recanati is making is that, even where the illocutionary act actually performed is the same as the indicated illocutionary act, the hearer has to work out that it is. Therefore, the locutionary act, i.e. the indicated illocutionary act, is not the same as the illocutionary act, i.e. the illocutionary act actually performed. Since, on Recanati's view, locutionary meaning encompasses all linguistic meaning, all the elements discussed in the final section of chapter 1 have to be seen as contributing to locutionary meaning. The question now is how locutionary meaning can be characterised. None of the speech act theorists mentioned in this section seem to have an answer to this question. What is clear is that on this last construal and the intermediate ones only a certain amount of locutionary meaning can be accounted for in truth-conditional terms.

2.5.3 Grice: saying and conventionally implicating

Maybe the most important thing to be said about Grice is that he can be seen as a hybrid figure, so to speak, straddling the divide set out above between philosophers interested in (formal) sentence meaning and 'ordinary language' philosophers. This becomes clear when one looks at his theory of meaning and his theory of conversation. While he firmly believed in characterising meaning in terms of

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by the performative.

[18] Of course, this is a gross oversimplification of what the interrogative mood encodes, but for present purposes it is all that is needed. For a more detailed treatment of the interrogative see 4.6.3.

speakers' intentions, he also wanted to preserve the notion that some natural language words, like for example *and*, can be given the same semantics as their logical counterparts, the truth-functional connective '&' in the case of *and*.

In *Meaning*, Grice (1957/1989: 213-223) characterises utterer's meaning as follows.

> "A meant_{NN} something by x" is (roughly) equivalent to "A intended the utterance of x to produce some effect in an audience by means of the recognition of this intention"; and we may add that to ask what A meant is to ask for a specification of the intended effect.
>
> (Grice 1989:220)

Timeless meaning (i.e. linguistic meaning) is then characterised in terms of utterer's meaning as the following quote from Grice shows.

> "x means_{NN} (timeless) that so-and-so" might as a first shot be equated with some statement or disjunction of statements about what "people" (vague) intend (with qualifications about "recognition") to effect by x.
>
> (Grice 1989: 220)

As these two definitions stand, meaning_{NN}, be it timeless meaning or utterer's meaning, is not confined to linguistic meaning. Grice wants the term 'utterance' to be taken broadly, i.e. not confined to linguistic utterances but to all kinds of actions, like for example gestures or the showing of a photograph, that can be used to produce an effect in an audience in the way described above. In later essays, both the notion of utterer's meaning and that of utterance-type meaning (i.e. timeless meaning), are given much more sophisticated definitions (see e.g. Grice (1968/1989 & 1969/1989)), though the fundamental concern to explicate sentence and word-meaning in terms of utterer's meaning and thus in terms of an utterer's intentions remains[19]. What also remains is that the notion of utterer's meaning goes beyond linguistic meaning. However, Grice also wanted to give an account of linguistic meaning, which, it seems fair to say, is a special case of meaning_{NN}.

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[19] Lycan (1999: 108-112) argues convincingly that this enterprise is doomed to failure. Grice ultimately has to give up the idea that speaker meaning alone can explicate sentence and word meaning and, in effect, ends up with a traditional truth-conditional theory of meaning.

Obviously, what is of particular concern for the purposes of this chapter is how Grice accounts for 'non-truth-conditional' linguistic meaning. In order to explain how he does this, let me start with what is possibly Grice's most fundamental distinction. In *Logic and conversation*, Grice (1967/1975/1989:24/5) distinguishes two ways in which a speaker can mean something, namely by 'saying' it or by 'implicating' it. At this point, he merely says that he wants 'what is said' to be closely related to the conventional meaning of the words uttered. Later, he (1969/1989, 1968/1989) tackles the task of expanding on this notion of 'what is said' and links it with the notions of utterer's meaning and timeless meaning.

Grice (1969/1989: 87) gives the following, as he says, "hideously oversimplified" definition of what it means for an utterer U to 'say' that p:

"*U* did something *x*	(1)	by which *U* meant that *p*.
	(2)	which is an occurrence of an utterance type S (sentence) such that
	(3)	S means 'p'
	(4)	S consists of a sequence of elements (such as words) ordered in a way licensed by a system of rules (syntactical rules)
	(5)	S means 'p' in virtue of the particular meanings of the elements of S, their order and their syntactical character."

He then goes on to say that this is still too wide for the following reason. U's doing something might be uttering a sentence like (35).

(35) She was poor but she was honest.

Both what U means by uttering (35) and what the sentence means will contain an element contributed by the word *but*. However, Grice does not want the contribution *but* makes to be part of 'what is said' in his special sense. He says a little more about this in *Utterer's meaning, sentence-meaning, and word-meaning* (Grice 1968/1989). There, he focuses on the distinction between 'what U said' and 'what U conventionally meant'. For Grice (1968/1989: 121) 'what U conventionally meant' is defined by the necessary and sufficient conditions in (36).

(36) U conventionally meant that p iff

(a) when U uttered X, the meaning of X included "p"

(b) part of what U meant when he uttered X was that p.

It seems that on this picture, 'what is conventionally meant' is both more and less than 'what is said': It is more in that the contribution *but* makes to the meaning of (35) is part of what is conventionally meant, but not of what is said; it is less in that what is said will contain the values of referential expressions which are not part of what is conventionally meant. Again, Grice (1968/1989: 120-122) makes it clear that he does not consider this contribution, made by elements like *but*, *therefore* and *moreover*, to be part of 'what is said'. The following quote should illustrate this.

> Now I do not wish to allow that, in my favored sense of "say", one who utters S_1 [Bill is a philosopher and he is, therefore, brave] will have *said* that Bill's being courageous follows from his being a philosopher, though he may well have said that Bill is a philosopher and that Bill is courageous. I would wish to maintain that the semantic function of the word 'therefore' is to enable a speaker to *indicate*, though not *say*, that a certain consequence holds.
>
> (Grice 1968/1989: 121)

Since the only two kinds of 'meaning' Grice envisages are what is said and what is implicated, and he clearly doesn't want 'non-truth-conditional' expressions to be part of what is said, they have to be part of what is implicated. Therefore, he (1967/1975/1989:25) introduces the notion of **conventional implicature** to capture the meaning of expressions such as *but*.

However, while it is crystal clear that Grice doesn't want elements like *therefore* to contribute to 'what is said', his reasons for this are quite mysterious. All he says about this is that he expects this sense of 'say', which excludes the meaning of words like *therefore*, "to be of greater theoretical utility" than other possible ways of construing it (1968/1989: 121). The only way of making sense of this is to assume that Grice wants 'what is said', at least in the case of assertions, to coincide with the truth-conditional content of the utterance. This is, at any rate, how Neale (1992) understands it.

> Although Grice is not as explicit as he might have been, it is clear upon reflection (and from scattered remarks) that *what is said* is to do duty (with a proviso I will get to in a moment) for *the statement made* or *proposition expressed* by *U*. Where the sentence uttered is of the type conventionally associated with the speech act of asserting (i.e. when it is in the "indicative mood") what is said will be straightforwardly *truth-conditional*.[20]
>
> (Neale 1992: 520-521)

For the purposes of this chapter, this means that the interesting elements will be precisely those, like *but* and *therefore*, that are part of what a speaker conventionally meant but not part of what the speaker 'said'.

In order to ensure that 'what is said' will not contain contributions made by words like *therefore*, Grice amends his definition of what is said. He does this by specifying that there is a special, central sub-class of speech-act, which seems to include asserting something and telling somebody to do something[21]. He (1968/1989: 121/2) then specifies that a speaker uttering *X* will have 'said' that *p* just in case she has performed a central speech-act with the content *p*, and *X* embodies some conventional device whose meaning is such that it indicates the performance of this central speech act. For instance, a speaker uttering (37) has said that the grass is green because, in uttering *the grass is green*, she has performed the central speech act of asserting that the grass is green and, presumably, it is the conventional meaning of the indicative mood indicators in this sentence to indicate the performance of an assertion.

(37) The grass is green.

Grice's way of excluding words like *therefore*, *moreover* and *but* from what is said on this new definition is to say that they indicate the performance of certain non-central speech-acts. For example, *moreover* indicates the performance of the speech act of adding (Grice 1989: 122)[22].

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[20] The proviso in question is that Grice sees what is said as part of what is meant. Therefore, not every proposition expressed by an utterance counts as what is said. For instance, the proposition expressed by ironical utterances or a metaphorical utterance like *John is a lion* does not count as what is said, because it is not part of what the speaker of the utterance means.

[21] Grice (1968/1989: 118-119) only mentions these two, but, presumably, asking questions also counts as a central speech act.

[22] As Blakemore (2000) points out, there is something odd about applying the notion of speech act to

In strand five of his *Retrospective Epilogue*, Grice (1989: 359-368) says more about this. He starts out trying to find a 'central' kind of signification and he ends up postulating two different kinds of centrality: formality and dictiveness (1989: 360). Signification will be formal if it falls under the conventional meaning of the expressions used. Dictiveness, on the other hand, is linked with what is said. Thus Grice says that

> [...]special centrality should be attributed to those instances of signification in which what is signified either is, or forms part of, or is specially and appropriately connected with what the signifying expression (or its user) *says* as distinct from implies, suggests, hints, or in some other less than fully direct manner conveys.
>
> (Grice 1989: 360)

In other words, an expression will be dictive if its meaning is linked (and here Grice is not being as clear and specific as one could wish) to what is said.

The elements which are of special interest to the concerns of this chapter, i.e. those which, in Grice's earlier terminology, carry conventional implicatures, are now analysed as being formal but non-dictive. This just seems to be another way of saying that they are part of what a speaker conventionally meant but not of what the speaker said. According to Grice, it might be quite surprising, "slightly startling" as he (1989: 362) puts it, that there are such elements which are formal but not dictive. As before, he enlists the help of speech-acts to account for this weird and wonderful possibility. The example he uses is (38).

(38) My brother-in-law lives on a peak in Darien; his great aunt, on the other hand, was a nurse in World War I.

(Grice 1989: 361)

Grice points out that a hearer presented with (38) might well be baffled and will certainly start wondering what the contrast is between the speaker's brother-in-law living on a peak in Darien and the great aunt being a nurse in WWI. If it should turn out that the speaker had no contrast in mind, she could certainly be accused of

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such a thing as 'adding'.

misusing the expression *on the other hand.* However, it would not be enough to make her statement in (38) false. Grice's (1989: 362) explanation for this is that, in uttering (38), a speaker in effect performs several speech-acts at different but related levels. Thus, a speaker uttering (38) is making the ground-floor statements in (39a) and (b) and at the same time she's performing the higher-order speech-act of commenting on the performance of the two lower-order speech-acts. In the case of *on the other hand* (and, presumably, also *but, although* and a number of other expressions) this comment is one of contrasting.

(39) (a) My brother-in-law lives on a peak in Darien.

(b) His great aunt was a nurse in World War I.

(c) There is a contrast between asserting (a) and asserting (b).

In the case of (38), this higher-order speech-act is one of contrasting the two ground-floor statements. This could be rendered as (39c).

To sum up this section, Grice accounts for the meaning of non-truth-conditional connectives by saying that they encode conventional implicatures which concern the performance of a higher-order speech-act, commenting on lower order speech-acts. It does not seem too difficult to imagine that Grice could account for the meaning of illocutionary and attitudinal adverbials, illocutionary and attitudinal particles along similar lines. For instance, *frankly* could be seen as commenting on the performance of the ground-floor speech act by indicating that it is being performed in a frank manner. However, it's more difficult to imagine what sort of higher-order speech act would be performed in the use of focus particles. It is even less clear how Grice would deal with the 'stylistic differences' listed in 1.5.5. What does seem clear, though, is that Grice would not treat indexicals as encoding conventional implicatures. In his view, at least their referents[23] are part of 'what is said', which, according to him, is determined by the meaning of the words, disambiguation and reference assignment (Grice 1967/1975/1989: 25).

[23] It's unclear in what terms Grice would want to account for the linguistic content of indexicals.

2.5.4 Bach: against 'conventional implicature'

As the last section showed, the central notion Grice employs in his treatment of those 'non-truth-conditional' expressions that he considers is that of conventional implicature. Bach (1999) takes issue with this notion. His (1999: 327) starting point is that the notion occupies an uncomfortable position within Grice's framework in that it describes meaning that is semantic (i.e. linguistically encoded) without being part of what is said. He then goes on to argue that all expressions that have traditionally been analysed as carrying conventional implicatures fall into one of two categories. Either they are really part of what is said or they are vehicles of second order speech acts[24]. Here, I will only give a brief outline of Bach's argument and its import for the treatment of the 'non-truth-conditional' devices under discussion in this chapter.

Bach's (1999) first step in his argument against the notion of conventional implicature is to show that a whole host of linguistic devices that have traditionally been seen as carrying conventional implicatures really contribute to what is said. To show that this is the case, he subjects them to what he calls the "IQ", or indirect quotation, test. This test is based on his (1999: 339) belief that "the 'that'-clause in an indirect quotation specifies what is said in the utterance being reported". This poses a problem for the assumption that connectives like *but* and *although* are not part of what is said, because as (40) and (41) show, they can both occur perfectly easily in an indirect quotation.

(40) Mary said that Peter is a bore but she likes him.

(41) Mary said that she likes Peter although he is a bore.

While each of these sentences could be understood in a number of ways, the crucial point is that they can be understood as indirect reports of John's utterances of (11) and (12) respectively.

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[24] Given that Grice himself analyses conventional implicatures in terms of higher-order speech acts, it is somewhat baffling that Bach argues against such a notion at the same time as analysing the meaning of a number of expressions in terms of higher-order speech acts. So, the main import of his position is

(11) Peter is a bore but I like him.

(12) I like Peter although he is a bore.

From this, Bach concludes that connectives like these that can occur in indirect quotations really contribute to what is said. However, he (1999: 343-350) recognises that there are a number of factors that conspire against such a conclusion so he sets out to defuse each one of them.

First, he observes that *but* doesn't encode a unique contrastive relation but has an import that varies from context to context.[25] For this reason, he claims, any particular account of the meaning of *but* in truth-conditional terms is vulnerable to counterexample. His answer to this problem is to make the truth-conditional contribution of *but* underspecified and context-dependent, by saying that *but* encodes something like "there is a certain contrast between the two conjuncts". This seems to require a process of pragmatic enrichment ('completion' in Bach's terms) in order to derive the proposition communicated (parallel to his treatment of indexicals discussed in 4.6.2).

Second, the contrast that *but* indicates is often not part of what the speaker is asserting but is taken to be part of shared background knowledge, i.e. to be pragmatically presupposed. His way of disposing of this argument is to say that not everything that is said has to be equally important and that there is, therefore, nothing incompatible between the contribution *but* makes being part of what is said and its being pragmatically presupposed.

Third, most people would say that an utterance of (42), for example, is true just as long as both conjuncts are true, even if there is no discernible contrast between the two conjuncts.

(42) Peter is a nice guy but I like him.

Bach believes that this intuition is the result of a forced choice. According to him, one should allow for the possibility that one and the same sentence can express more

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that a small subset of Grice's conventional implicature cases are really part of what is said.

[25] Neale (1999: 58) also makes this observation. For a full discussion of the range of interpretations *but* can receive, see 5.2.

than one proposition and can, therefore, be partly true and partly false[26]. For instance, (42) could be seen as expressing the primary propositions that Peter is a nice guy and that John likes him and the secondary proposition that Peter's being a nice guy contrasts with John's liking him. In this case, the two primary propositions could be judged to be true, while the secondary one could be judged to be false. The argument then is that the falsity of the secondary proposition isn't enough to make the whole utterance false precisely because it is secondary. Thus, if one gave people more than just a choice of saying that the whole utterance is true or the whole utterance is false, they might well say that an utterance of (42) is partly true and partly false.

Finally, Bach (1999: 347) concedes that the idea of *but* contributing to what is said might be unattractive because it seems to result in the claim that what is said by an utterance containing *but*, contains an extra clause. For instance, what is said by an utterance of the two clauses in (42) would have to be specified in three clauses, something like those in (43). In fact, Bach claims that it was considerations like this that made Grice opt for a conventional implicature treatment.

(43) a. Peter is a nice guy.
b. John likes Peter.
c. There is a certain contrast between someone being a nice guy and other people liking them.

Bach counters this kind of worry by saying that what is said can be specified or reported by a sentence including *but* and that there is no need to assume that there has to be an extra clause. Further on, he (1999: 350-355) argues that expressions such as *but* function as operators on propositions that preserve the original proposition(s), while also yielding a new one. For instance, Bach (1999: 352) sees *still* as an operator that indicates that the state of affairs described by the sentence without *still* has obtained during some interval up to the time of reference. Unfortunately, Bach doesn't say how he would see *but* affecting the two propositions it operates on.

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[26] It will be seen in chapter 8 that Bach (1999) and Neale (1999) both independently reach this conclusion.

There is much that could (and, at some point, should) be discussed and criticised about Bach's view. More will be said about his suggestion that a single sentence may express more than one proposition in 8.2. For a full critical discussion of Bach's approach to conventional implicature and what is said, see Carston & Iten (forthcoming). For the purposes of this chapter, it's enough to note that only a small number of the expressions listed in 1.5 behave like *but* and *although* when it comes to Bach's IQ test. Focus particles, such as *even* in (44), and elements listed under the heading of 'stylistic differences' in 1.5.5, such as *that bastard* in (45) and *manage* in (46), obviously can occur in indirect quotations. One would, therefore, expect Bach to want to account for these expressions along similar lines to *still* and *but* (that is, as elements of what is said but probably not as propositional operators).

(44) Jack said that even John came to the party.
(45) Jack said that that bastard Peter ate his steak.
(46) Jack said that Peter managed to repair the car.

(47)-(51), on the other hand, show that other connectives, illocutionary and attitudinal adverbials and illocutionary and attitudinal particles don't pass the IQ test.

(47) *John said that Peter is a bore nevertheless he likes him.
(48) *John said that frankly, Peter is a bore.
(49) *John said that sadly, he can't stand Peter.
(50) *John said that Peter is an interesting man, huh.
(51) *John said that oh, Peter is such a bore.

All these expressions that don't pass the IQ test, Bach analyses in terms of second-order speech acts. This analysis seems to amount to nothing other than Grice's own analysis of conventional implicatures in terms of higher-order speech acts.

Finally, there are a number of devices listed in 1.5 for which it isn't clear if and how the IQ test could work. For instance, although (52) is an acceptable sentence of English, it clearly can't do duty as an indirect report of John's utterance of (7).

(52) John said that he saw her yesterday.

(7) He saw her yesterday.

It seems that one would have to utter something like (53) in order to report John's utterance.

(53) John said that Jim saw Ruth on 22 May 2000.

Therefore, it seems that the linguistic meaning of indexicals isn't part of what is said on this picture. It will be seen in 4.6.2 that this is not Bach's position on what is said by sentences containing indexicals and that the IQ test, in these cases, doesn't quite make the predictions that fit with Bach's conception of what is said.

It seems clear that non-declarative utterances can't occur in indirect quotations without some modification. For instance, (1) obviously must be reported as (54) rather than (55).

(1) Do you like chocolate?

(54) John asked whether Jack liked chocolate.

(55) *John said that does Jack like chocolate.

It seems, then, that mood indicators don't affect **what** is said, but rather what **kind of saying** is involved (cf. Bach & Harnish 1979: 25, as discussed in 2.5.2). However, it seems that 'saying' in Bach's (and Bach & Harnish's) technical sense is a far cry from the natural language 'saying' that introduces indirect quotations. In other words, it's doubtful whether Bach's IQ test is the right tool for getting at 'what is said' in his technical sense.

Summing up, in this section, I have briefly introduced Bach's treatment of some of the 'non-truth-conditional' devices in 1.5 and I have shown that he treats some of them as truth-conditional, while the others receive a second-order speech act analysis in line with Grice's conventional implicature. Finally, it isn't clear from Bach (1999) how he would treat indexicals and mood indicators.

2.6 Conclusion

In this chapter, I've discussed the ways in which, in the last one hundred years, a number of theorists have treated the range of 'non-truth-conditional' expressions listed in 1.5 within their essentially truth-conditional frameworks. As the different sections have shown, there doesn't seem to be a single theorist or tradition that can account for the meaning of all of these expressions. What is more, there isn't a single theorist or tradition that accounts for all expressions with non-truth-conditional meaning in the same terms. Such rare consensus among linguists and philosophers can indicate only one thing, namely that the label 'non-truth-conditional meaning' is both non-explanatory and descriptively inadequate; it's a label for a heterogeneous class of expressions framed in terms of what they are not rather than what they are and, therefore, is of little use when it comes to providing a semantic account of these expressions.

In the next chapter, I'll look at Argumentation Theory – a framework that, ultimately, aims to account for all linguistic meaning in non-truth-conditional terms. I will argue that this is not a viable alternative to semantic accounts that rely on the notion of truth conditions. The chapter following that, is devoted to Relevance Theory, which, I will argue, provides a cognitive framework within which the kinds of meaning encoded by all the 'non-truth-conditional' expressions listed at the end of the last chapter can be captured, and which envisages a role for truth conditions, albeit not quite the traditional one.

CHAPTER 3

ARGUMENTATION THEORY: ACCOMMODATING THE 'NON-TRUTH-CONDITIONAL' AT THE COST OF THE 'TRUTH-CONDITIONAL'

3.1 Introduction

The theories discussed in chapter 2 are all truth-conditional, at least to some extent. That is, the notion of truth conditions plays a more or less central role in each one of them. This chapter is concerned with Anscombre & Ducrot's (henceforth A & D) Argumentation Theory (AT), which starts out as an essentially truth-conditional theory with a way of accommodating 'non-truth-conditional' meaning, but ends up being completely non-truth-conditional, i.e. with no place for truth conditions at all. Obviously, this fact alone makes the theory worth investigating. However, the theory also stands out because it offers a number of interesting and promising accounts of the meanings of some of the 'non-truth-conditional' expressions listed in 1.5. For instance, Anscombre & Ducrot (1977) offers an AT account of the meaning(s) of French *but*, which will be discussed in some detail in chapter 5. In this chapter, I concentrate on the theoretical underpinnings of such accounts and only consider A & D's analyses of particular expressions where they are needed to illustrate a theoretical point. Obviously, it would quite likely be the work of a lifetime to capture AT, a theory which has been evolving for a quarter of a century, in all its detail and to do it justice in every nuance. Therefore, all I can hope to do here, is give a (possibly too) broad characterisation of the theory and some of its development, and point out some of the difficulties it runs into.

In its present state, AT is a non-cognitive, non-truth-conditional semantic theory, which takes linguistic utterances (as opposed to abstract sentence-types) as its domain. Its aim is to provide a semantic deep structure for each utterance, which includes a specification of the argumentative potential of the utterance (Nyan 1998). As mentioned above, the theory has produced some promising accounts of linguistic expressions encoding non-truth-conditional meaning, notably *but* and *even* (see e.g. A & D (1983), Nyan (1998)). However, as will be shown in this chapter, the theory

itself suffers from some very serious flaws, especially in its later incarnations (e.g. Ducrot (1993)).

In sections 3.2 to 3.5, I will give an outline of the central points of AT and show its development spanning two decades. In these sections I will mostly keep criticisms and queries to footnotes so as not to distract from the presentation. I will give a fuller critical discussion and evaluation of the theory in section 3.6, paying special attention to the move from a semantics with some truth-conditional and some non-truth-conditional elements to a completely non-truth-conditional semantics as it is argued for by Ducrot (1993).

3.2 The beginnings of Argumentation Theory

AT is based on the view that it is a fundamental characteristic of utterances that they can be used as premises or conclusions in arguments. It's important to note that the nature of these arguments is such that they cannot be captured by the standard rules of logic.

Anscombre & Ducrot (1976) observed that utterances with the same informational (i.e. truth-conditional) content cannot always be used as arguments in favour of the same set of conclusions. For instance, according to A & D, (1) and (2) have the same informational content, i.e. the same truth conditions[1]. However, (1) can be used as an argument in favour of both (3a) and (b). (2), on the other hand, can only be used as an argument in favour of (3a). Thus, (4a) and (b) are both perfectly acceptable, whereas (5b) is unacceptable.

(1) Peter is the same height as Mary.

(2) Peter is as tall as Mary.

(3) a. Peter is tall for his age.

b. Peter is short for his age.

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[1] In fact, this is an arguable point. It could also be claimed that *as tall as* has the semantic value of *at least the same height as*. For further discussion of this topic see Atlas (1984), who, incidentally, argues against both positions and offers a third possibility.

(4) a. Peter is tall for his age: he's the same height as Mary who is a year older.

b. Peter is short for his age: he's the same height as Mary who is a year younger

(5) a. Peter is tall for his age: he's as tall as Mary who is a year older.

b. *Peter is short for his age: he's as tall as Mary who is a year younger.

(examples translated and adapted from Anscombre & Ducrot 1976: 10)

Examples of this sort led Anscombre & Ducrot to believe that a purely truth-conditional semantics was not sufficient and that the argumentative potential of an utterance was an important aspect of its meaning.

In early AT (e.g. A & D 1976), the argumentative potential of an utterance was characterised in terms of the conclusions it could be used to support. Thus, it would be part of the meaning of (1) that it can be used as an argument for both (3a) and its contrary (3b). In fact, A & D would say that the argumentative orientation of (1) was neutral (see e.g. Moeschler & Reboul (1994:314/5)). Similarly, the fact that (2) can only be used to support the conclusion in (3a) is part of the meaning of (2). Unlike (1), the argumentative orientation of (2) is not neutral; this utterance is oriented towards conclusions of the type in (3a).

The fact that (1) and (2), and other examples of the same sort, clearly differ in their encoded meaning, even though they don't differ in their truth-conditional content[2], led A & D (1976: 8) to postulate an **integrated pragmatics** (*pragmatique intégrée*). They call it a 'pragmatics' because it is concerned with the sort of meaning that can't be captured in terms of traditional truth-conditional semantics. What they mean by 'integrated' is that the non-truth-conditional aspects of the meaning of *as...as* in (2) are, nevertheless, aspects of its encoded meaning and do not depend on the recovery of some prior truth-conditional semantic meaning the way, for example, Gricean conversational implicatures depend on the recovery of the truth-conditional content of the utterance ('what is said'). In perhaps more intuitive

[2] see fn. 1

terms, A & D's integrated pragmatics could be seen as a non-truth-conditional semantics, which they saw, at that time, as existing alongside a traditional truth-conditional semantics. In effect, it seems that, the postulation of an integrated pragmatics means that there is no semantics/pragmatics distinction in AT, since it is not clear that A & D also allow for a non-integrated pragmatics which deals with non-encoded aspects of utterance meaning. It will be seen at the end of this chapter that this is an important issue.

3.3 Argumentative contents, the law of negation and the law of inversion

3.3.1 Sentence (*phrase*) and utterance (*énoncé*)

Before presenting A & D's (1983) more detailed way of accounting for examples like (1) and (2), let me say something about A & D's conception of the basic notions of sentence (*phrase*) and utterance (*énoncé*). As mentioned in the introduction, A & D (1983) are interested in utterance meaning. By 'utterance' (*énoncé*) A & D (1983: 84) mean utterance token, i.e., as they put it, linguistic material with 'historical' characteristics (e.g. a specific position in space and time). They contrast this with the notions of utterance type (*énoncé-type*) and 'sentence' (*phrase*). According to them, the utterance type is the linguistic material the utterance consists of. Thus, for A & D, (6b) and (7), which they see as an 'act of hoping', are tokens of the same utterance type because, at least in French, they both contain exactly the same linguistic material.

(6) a. Est-ce que Pierre va venir au rendez-vous?
'Is Peter coming to the meeting?'

b. J'espère.
'I hope so'

(7) J'espère.
'I'm hoping.'

(A & D 1983: 84)

A & D's 'sentence' (*phrase*), on the other hand, is a theoretical construct, the deep structure underlying an utterance (token). Thus, for A & D (6b) is a token of the 'sentence' in (8), while the 'sentence' underlying (7) will be just *J'espère.*

(8) J'espère que p.
'I hope that p.'

For A & D, utterance tokens are the starting point, the 'observable facts' (A & D 1983: 80-81; Ducrot 1984: 180) on which their work is based. In a bid to account for the meaning of utterances, each of them is assigned a 'sentence' or deep structure. While statements concerning utterances are intended to describe the 'facts', those concerning 'sentences' are intended to explain them. This shows that A & D's notion of 'sentence' (*phrase*) is significantly different from what is generally understood by 'sentence' in linguistics and philosophy. For this reason, I am following Nyan (1998) in referring to A & D's *phrase* as 'deep structure' rather than 'sentence' in the rest of this chapter.

A & D (1983: 85) and Ducrot (1984: 180) call the semantic value of utterances **sense** and the semantic value of deep structures **signification**. Analogous to utterances and deep structures themselves, senses are observable, but significations are not (Ducrot 1984: 180). According to Ducrot (1984: 181-183), the signification of a deep structure is a set of instructions as to how to assign sense to the utterance. Thus to know the signification of the deep structure underlying (9), is to know what to do to interpret an utterance of it.

(9) The weather's nice.

(from Ducrot 1984: 181)

Ducrot (1984: 181) claims that it is part of the signification of the deep structure underlying (9) that the hearer is instructed to look for the place the speaker is talking about and to accept that the speaker is asserting the existence of fine weather in that place. The sense of the utterance, on the other hand, Ducrot (1984: 182) describes as a description of the event of making the utterance (*énonciation*). This includes

information about the illocutionary force of the utterance and its argumentative potential.

According to Ducrot (1984: 180), the systematic association between senses and utterances is an 'observable fact'. To explain this observable association, Ducrot chooses to associate the theoretical construct of signification with the deep structures that underlie utterances. Ducrot (1984: 180) believes that this is an interesting way of proceeding because he supposes that it's possible to formulate laws to calculate the signification of a deep structure on the basis of its lexico-grammatical properties and different laws to predict the sense of an utterance on the basis of the signification of the deep structure that underlies the utterance. While Ducrot (1984) sees the signification of deep structures in terms of instructions, A & D (1983) saw it in terms of contents (*contenus*). This is what the next sub-section is concerned with.

3.3.2 Contents (*contenus*)

Anscombre & Ducrot (1983: 79-113) give a detailed analysis of the meaning of utterances like (1) and (2) above. First, they make it clear that they don't want to assign meaning to utterances themselves, but rather to the deep structures underlying them. Thus, each deep structure is given a set of 'contents' (*contenus*), some of them asserted, some of them presupposed. The asserted contents are equivalent to informational or 'factual' (or, indeed, truth-conditional) contents, and at least some of the presupposed contents are seen as argumentative. According to Anscombre & Ducrot (1983: 102), (2) will have the asserted content in (10a) and the presupposed content in (10b).

(2) Peter is as tall as Mary.

(10) a. [Peter's height equals Mary's height].

b. [[Peter's height equals Mary's height] and [Peter is tall] have the same argumentative orientation][3]

[3] The square brackets indicate that we are dealing with contents.

Although they don't spell this out, it seems reasonable to assume that they would say that (1) has the same asserted, or factual, content as (2), i.e. (10a), but that it lacks the (argumentative) presupposed content in (10b). Hence its neutral argumentative orientation. The idea is that these contents are arbitrarily assigned to a finite number of core deep structures (*phrases-noyaux*) and that the contents of more complex deep structures can be calculated on the basis of the contents of the core deep structures which make up the more complex deep structure (A & D 1983: 97). This is done with the help of two basic rules: the law of negation (*la Loi de Négation*) and the law of inversion (*la Loi d'Inversion*), which will be illustrated below.

All in all, A & D's semantic description involves three steps or mechanisms. The first assigns a set of asserted (factual) contents and presupposed contents, some of which are argumentative, to each core deep structure. The second derives new contents from those that make up the meaning of the core deep structure using the laws of negation and inversion. The third uses the results of the first two mechanisms to assign an argumentative orientation to the whole (complex) deep structure.[4] The best way to see how this works is to look at some examples.

3.3.3 The law of negation (*la Loi de Négation*)

Anscombre & Ducrot (1983: 99-104) account for the meaning of (11) as follows.

(11) Peter is wrong to believe that he's as tall as Mary.

(12) a. But he is quite tall.

b. *But he is quite short.

First of all, they observe that an utterance of (11) can be followed quite easily with an utterance of (12a) but not with an utterance of (12b). They analyse the meaning of *but* in such a way that it can only felicitously connect two clauses with opposite argumentative orientation[5]. Therefore, A & D predict that (11) and the clause after

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[4] NB. The first two mechanisms assign argumentative orientation to *contents* and not to the *deep structure*. Also note that, from this point onwards, the argumentative orientation of *deep structures* and utterances is only ever given in comparative terms, e.g. 'same as' or 'opposite'.

[5] Clearly, this can't be the only condition for the felicitous use of *but*. If it were, utterances of the form 'P but not-P' should be felicitous, since, presumably, P and not-P have opposite argumentative

but in (12a) have opposite argumentative orientations, while (11) and the clause after *but* in (12b) have the same argumentative orientation (hence the infelicity when (11) is followed by (12b)). They then proceed to show that this is the case by appealing to the law of negation.

A & D start by assuming that *P* in (13) has the asserted content *a* and the presupposed content *b*. They then assign the whole deep structure in (13) the asserted content α and the presupposed contents β_1 and β_2 in (14)[6].

(13) X is wrong to believe that P.

(14) α: [not-P]

β_1: [b]

β_2: [X believes that a]

As mentioned above, (2) is assigned the asserted content *a* and the argumentative presupposed content *b* in (15).

(2) Peter is as tall as Mary.

(15) a: [Peter's height equals Mary's height]

b: [[Peter's height equals Mary's height] and [Peter is tall] have the same argumentative orientation]

Now (11) can be assigned contents on the basis of the contents of (2) and (13). (11) will thus have the asserted content α and the presupposed contents β_1 and β_2 in (16), where β_1 is an argumentative content.

(11) Peter is wrong to believe that he's as tall as Mary.

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orientations. However, utterances of this form clearly are not felicitous: For instance, *Peter is tall but he's not tall.* is not acceptable. It is quite conceivable that, at this stage, A & D would say that such utterances are not acceptable because their asserted contents are contradictory. For a fuller AT account of *but* see A & D (1977).

[6] It seems curious that there is no asserted content along the lines of 'X is wrong about something'.

(16) α: [Peter's height doesn't equal Mary's height]

β_1: [[Peter's height equals Mary's height] and [Peter is tall] have the same argumentative orientation]

β_2: [Peter believes that his height equals Mary's]

Now, the argumentative orientation of the deep structure underlying (11) cannot be calculated on the basis of (16) because the presupposed content β_1, which is concerned with argumentative orientation, does not apply to the asserted content α, but to its unnegated counterpart. This is where the law of negation comes in. A & D's law of negation is given in (17).

(17) Law of Negation:

If c_1 and c_2 are two contents and if a deep structure has the content c_3: [c_1 is an argument for c_2], then this can be re-written as [$\neg c_1$ is an argument for $\neg c_2$].[7]

(A& D 1983: 101)

Since 'c_1 is an argument for c_2' is equivalent to 'c_1 and c_2 have the same argumentative orientation', the law of negation can be applied to β_1 in (16) to yield β'_1, given in (18).

(18) β'_1: [$\neg$[Peter's height equals Mary's height] and $\neg$[Peter is tall] have the same argumentative orientation]

A & D call this process of deriving a presupposed content which applies to the asserted content of a deep structure from one which doesn't apply to the asserted content with the help of the laws of the second mechanism *centrage* (A & D 1983: 103).

The third mechanism assigns an argumentative orientation to a deep structure on the basis of its argumentative presupposition after this presupposition has been

'centred' on the asserted content of the deep structure. This means that now an argumentative orientation can be assigned to the deep structure underlying (11) by using β'_1 in (18). In this way, (11) comes out as having the same argumentative orientation as 'Peter is not tall', which is obviously the opposite of the argumentative orientation of 'Peter is tall'. This explains why the use of *but* to connect (11) and (12a) is felicitous, while the result of using *but* to connect (11) with (12b) is rather less acceptable.

3.3.4 The law of inversion (*la Loi d'Inversion*)

As Anscombre & Ducrot (1983: 104-111) observe, the law of inversion concerns two sets of argument and conclusion. First, the law of inversion is given at the (observational) level of the utterance (as opposed to the theoretical level of the deep structure of the utterances, i.e. what A & D refer to as the 'sentence'). It states that if utterance *u* is a stronger argument for conclusion *c* than utterance *u'* for conclusion *c'*, then the negation of *u'* (*not-u'*) will be a stronger argument for *not-c'* than *not-u* is for *not-c*. This shows again that A & D's argumentative laws are a far cry from the rules of standard logic. Before saying more about the law of inversion and its applications, let me say something about the notion of the comparative strength of arguments, which, as A & D (1983: 105) note, is basic to AT.

According to A & D (1976: 15), *u* is a stronger argument than *u'* in favour of *c* if a speaker who uses *u'* as an argument for *c* would also have to admit *u* as an argument for *c*, but not vice versa. For example, (20) could be seen as a stronger argument in favour of (21) than (19), because, intuitively, a speaker accepting (19) as an argument for (21) would also have to accept (20) as an argument for the same conclusion[8]. Conversely, a speaker accepting (20) as an argument for (21) would not necessarily have to admit (19).

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[7] This shows clearly that 'is an argument for' is not equivalent to the material conditional and that argumentative laws are not based on the rules of standard logic. For, from $P \rightarrow Q$, $\neg P \rightarrow \neg Q$ does not follow.

[8] As will be discussed below, there are counterarguments, which pose a problem for this definition of comparative argumentative strength (and other central AT notions) and which led A & D (1983: 163-179) to adjust their definitions.

(19) Jane has a sore throat. *u'*

(20) Jane has pneumonia. *u*

(21) Jane can't sit the exam this afternoon. *c* (= *c'*)

This explains the notion of argumentative strength for utterances supporting the same conclusion.

Examples (19)-(21) can also be used to show that the law of inversion states something intuitively correct in cases where *u* and *u'* are arguments for the same conclusion. Let (20) be *u*, (19) *u'* and (21) both *c* and *c'*. Now, it has been shown above that (20) is a stronger argument in favour of (21) than (19). According to the law of inversion, the negation of (19) should therefore be a stronger argument for the negation of (21) than is the negation of (20). The negations of (19)-(21) are given in (22)-(24).

(22) Jane doesn't have a sore throat. *not-u'*

(23) Jane doesn't have pneumonia. *not-u*

(24) Jane can sit the exam this afternoon. *not-c = not-c'*

Intuitively, the law of inversion makes the right prediction in this case. (22) does indeed seem to be a stronger argument than (23) in favour of (24): a speaker who accepts that the fact that Jane doesn't have pneumonia is an argument in favour of her being able to sit an exam that afternoon will also have to accept Jane's not having a sore throat as an argument for the same conclusion. However, someone accepting Jane's not having a sore throat as an argument for Jane's being able to sit an exam will not necessarily have to accept Jane's not having pneumonia as an argument for the same conclusion. After all, Jane could have a heavy cold, a state of affairs compatible with her not having pneumonia, which would nevertheless be an argument for her not sitting the exam. This seems to show that, intuitively, the law of inversion is right for cases where $c = c'$. However, the law of inversion is also supposed to apply to cases where two utterances are arguments for different conclusions. The problem with this is that A & D do not make it clear how their notion of argumentative strength applies to utterances that are arguments for different

conclusions[9]. All they do is give an example of a case where *c* and *c'* are not identical but opposites.

According to A & D (1983: 107), the *but* in (25) is scalar in nature, i.e. it not only indicates that the two clauses (*p* and *q*) support contradictory conclusions (or have opposite argumentative orientations) but it also indicates that *q* (*Peter has cleared the table*) is a stronger argument for *c* (*Peter is quite helpful*) than *p* (*Peter didn't do the dishes*) is for *not-c* (*Peter isn't helpful*).

(25) (Peter is quite helpful)$_c$: (he didn't do the dishes)$_p$ but (he cleared the table)$_q$.

If this is correct, the law of inversion should be applicable to *p* and *q* and *c* and *not-c*, i.e. *not-p* should be a stronger argument for *not-not-c* (= *c*) than *not-q* is for *not-c*. Therefore, it should be possible to construct an acceptable utterance of the form '*not-not-c* (= *c*): *not-q* but *not-p*'. As (26) shows, this is indeed possible.

(26) (Peter is quite helpful)$_c$: (he didn't clear the table)$_{not\text{-}q}$
but (he did the dishes)$_{not\text{-}p}$.

Anscombre & Ducrot (1983: 107-109) contrast this with (27), where, according to them, *but* is not scalar in nature and where, consequently, an utterance of the form '*not-not-c* (= *c*): *not-q* but *not-p*' would not be acceptable to a speaker uttering (27), as (28) shows.

(27) (I like Peter)$_c$: (his manners are bad)$_p$ but (his intentions are good)$_q$.

(28) (I like Peter)$_c$: (his intentions are bad)$_{not\text{-}q}$ but (his manners are good)$_{not\text{-}p}$.

Thus, A & D argue, in cases of scalar *but*, like the one in (25), an utterance of '*p* but *q*' supports the conclusion *q* supports because *q* is a stronger argument for *c* than *p* is for *not-c*. In cases of non-scalar *but*, like the one in (27), on the other hand, this is supposed to be because the speaker gives more importance to *q* than she does to *p*. The problem with this is that, intuitively, in (27), too and not just in (25), *q* is a

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[9] In fact, this oversight is not redressed in later definitions.

stronger argument for *c* than *p* is for *not-c*. At least to me, it seems that *Peter's intentions are good* is a stronger argument for *I like Peter* than *Peter's manners are bad* is for *I don't like Peter.* Interestingly, the law of inversion doesn't apply here: I certainly wouldn't accept that *Peter's manners are good* is a stronger argument for *I like Peter* than *Peter's intentions are bad* is for *I don't like Peter.* Since A & D don't actually define their notion of argumentative strength for arguments with different conclusions, it's impossible to test whether my intuitions are right and *Peter's intentions are good* really is a stronger argument than *Peter's manners are bad.* If my intuitions were right, A & D's law of inversion would be in trouble, since there would be at least one case where it should apply but doesn't. Whatever may be the case, it seems to me that the difference between (25) and (27) doesn't lie in the fact that they contain a different kind of *but*, but that their contents are different and that (28) is not acceptable simply because most people won't accept that Peter's good manners are a better argument for liking him than his having bad intentions is for disliking him. In fact, I have a nagging suspicion that, for many people, Peter's manners are not a factor at all when it comes to liking or disliking him. Putting these worries aside for the moment, let's look at the formal use of the law of inversion.

A & D (1983: 110/1) use (29) to show how the law of inversion, this time formulated at the level of contents, works formally.

(29) Peter is wrong to believe that he is taller than Mary and even that he is as tall.

In fact, they don't actually give the formal version of the law of inversion, but it seems plausible that, analogous to the law of negation, this law for contents would look something like (30).

(30) Law of Inversion

If c_1, c_2 and c_3 are contents and a deep structure has the content c_4: [c_1 is a stronger argument than c_2 for c_3], then this can be rewritten as [not-c_2 is a stronger argument than not-c_1 for not-c_3].[10]

Before looking at its application to (29), a word needs to be said about A & D's analysis of *even*. According to them (1983: 105), *even* in an utterance of the form '*p* and even *q*' indicates that *p* and *q* support the same conclusion and that the speaker sees *q* as a stronger argument than *p* for that conclusion. Thus, A & D's prediction is that *Peter is wrong to believe that he is as tall as Mary* is a stronger argument than *Peter is wrong to believe that he is taller than Mary* for some conclusion *c* which they both support, because, otherwise, (29) would not be felicitous.

As has been shown above, (11), the second conjunct of (29), has the asserted content α and the argumentative presupposed content β_1 given in (16).

(11) Peter is wrong to believe that he's as tall as Mary.

(16) α: [Peter's height doesn't equal Mary's height]

β_1: [[Peter's height equals Mary's height] and [Peter is tall] have the same argumentative orientation]

Without going into the question in more detail, A & D (1983: 110) state that (31), has the asserted content *a'* and the presupposed content *b'* in (32).

(31) Peter is taller than Mary.

(32) a': [Peter's height > Mary's height]

b': [[Peter's height > Mary's height] and [Peter is tall] have the same argumentative orientation]

If this is combined with what was said above about the contents of 'X is wrong to believe that P', (33), the first conjunct of (29), can now be assigned the asserted content α' and the argumentative presupposed content β_1' in (34).

(33) Peter is wrong to believe that he is taller than Mary.

(34) α': ¬[Peter's height > Mary's height]

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[10] Note that this only covers the case where both arguments support the same conclusion. Since these are the only cases A & D discuss in any detail, this version of the law of inversion seems sufficient.

β_1': [[Peter's height > Mary's height] and [Peter is tall] have the same argumentative orientation]

At this point A & D make use of an axiom of the second mechanism, which states that if [x > y] and [x = y] are two contents that are arguments for the same conclusion, then [x > y] is always the stronger argument than [x = y]. If one applies this axiom to the contents of (11) and (33), the two conjuncts of (29), (29) can be assigned the argumentative content γ in (35).

(35) γ: [[Peter's height > Mary's height] is a stronger argument than [Peter's height = Mary's height]

Now the law of inversion can be applied to (35) to yield (36).

(36) γ': [¬[Peter's height = Mary's height] is a stronger argument than ¬[Peter's height > Mary's height]

The third mechanism, which assigns argumentative relations to deep structures (rather than contents), contains the law in (37)[11], which explains the use of *even* (A & D 1983: 111).

(37) If A and A' are two deep structures with the asserted co-oriented contents α and α' respectively and the second mechanism derives from the conjunction of A and A' the argumentative content [α is a stronger argument than α'], then A and A' have the same argumentative orientation and A is stronger than A'.

This means that it follows from (36) that (11) and (33), the two conjuncts of (29), have the same argumentative orientation and that (11) is a stronger argument than (33), which explains why the use of *even* in (29) is felicitous.

3.3.5 A counterexample and some revised definitions

As mentioned in footnote 8 above, A & D's (1976) definition of comparative argumentative strength runs into counterexamples. A & D (1983: 164-166) discuss the following case.

On their original definition, u_2 is a stronger argument than u_1 for some conclusion *c* if a speaker who accepts u_1 as an argument for *c* also has to accept u_2, but not vice versa. One of the examples A & D use is the utterance pair in (38). The original AT account of the meaning of *nearly* (*presque*) states that the word indicates that an utterance containing it has the same argumentative orientation (i.e. supports the same types of conclusion) as the corresponding utterance without *nearly* and that *p* is a stronger argument than *nearly p*. In other words, if the AT account of *nearly* is correct, (38b) should be a stronger argument than (38a) for the same type of conclusion[12].

(38) a. The barrel is nearly empty. u_1

b. The barrel is empty. u_2

(adapted from A & D 1983: 164)

It seems clear that, on A & D's definition, (38b) is indeed a stronger argument than (38a) for a conclusion like (39), for example: Any speaker who accepts that (38a) is an argument for (39) will also have to accept that (38b) is an argument for the same conclusion, but not vice versa.

(39) We need to get a fresh barrel.

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[11] It is not entirely clear what the motivation of this law is, apart from the fact that it is needed to account for these examples. In general, there seems to be a proliferation of laws and axioms in AT at this stage, whose motivation is not always clear.

[12] NB. There is, of course, a truth-conditional difference between (38a) and (b). However, A & D (1983: 165) don't want their explanation to hinge on this, because they're already moving towards abandoning truth conditions and they certainly don't want the truth conditions of an utterance to take priority over its argumentative properties.

However, as A & D (1983: 164) point out, if the conclusion were not (39) but something like (40), their definition of the notion of stronger argument would not apply.

(40) We need to drink just a little more.

(adapted from A & D 1983: 164)

As (41a) and (b) show, it is not the case that any speaker who accepts (38a) as an argument for (40) also has to accept (38b); for (38b) isn't an argument for (40) at all.

(41) a. The barrel is nearly empty. So, we need to drink just a little more.

b. The barrel is empty. So, we need to drink just a little more.

The existence of examples like (41a) and (b) means that A & D's definition of argumentative orientation and stronger argument and their account of the meaning of *nearly* cannot all be right. At this stage A & D (1983: 166) change their definitions of argumentative orientation and argumentative strength. However, as will be seen in the next section, at a later stage their definitions, and the account of the meaning of words like *nearly*[13], underwent some changes of a more far-reaching sort.

A & D's first step in changing the definition of argumentative strength is the introduction of a new distinction, between **argumentation** and the **act of arguing** (A & D 1983: 163-166). According to A & D (1983: 163) an **argumentation** is a discourse with at least two utterances u_1 and u_2, one of which is the premise (or argument) and the other the conclusion. An **act of arguing**, on the other hand, is an illocutionary act[14] which is part of the meaning of every utterance, whether it is used as a premise or as a conclusion in a given argumentation. This act consists in attributing a certain degree of a certain property (e.g. tallness, helpfulness, emptiness, etc.) to one or more entities or objects. This, according to A & D (1983: 166), is part

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[13] See Moeschler & Reboul 1994: 320-321

[14] The fact that Ducrot (1984) states in the preface that he studied and was influenced by the works of Austin and Searle, might lead one to assume that A & D's notion of illocutionary act is identical to that of Austin (1962) or Searle (1969, 1979), i.e. an act performed *in* speaking, such as warning, requesting, promising, etc. However, it is not entirely clear that A & D's notion is the same. At the

of the meaning of the utterance in the sense that the utterance "presents itself" as accomplishing such an act. The idea is that the kind of property a given utterance is taken to attribute to an object on a given occasion determines the kind of conclusion in favour of which the utterance can be used.

In their new definition of argumentative strength, A & D make use of this notion of act of arguing. Instead of defining argumentative strength and argumentative orientation in terms of conclusions, they now define them in terms of the properties the utterances attribute to objects and the degrees to which they do so. On A & D's (1983: 167) new definition, two utterances have the same argumentative orientation if they attribute the same property to the same objects[15]. They have opposite argumentative orientations if they don't, to any degree, attribute the same property to the same objects[16]. A & D's (1983: 166) new definition of argumentative strength is the following: u_2 is a stronger argument than u_1 if they both present their object as possessing the same property R and u_2 indicates a higher degree than u_1. In those cases where u_1 and u_2 support the same conclusion, u_2 will do so more strongly than u_1, but the definition of argumentative strength no longer demands that they should support the same conclusion, because the definition of argumentative orientation is no longer given in terms of conclusions[17]. This solves the problem

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very least, the illocutionary act of arguing is different from all other illocutionary acts in that it is supposed to be performed by every single utterance.

[15] This might make it look as though (1) and (2) have the same argumentative orientation, because they seem to attribute the same property to the same entity, i.e. they both seem to attribute height to Peter. However, A & D would be likely to say that *as tall as* attributes tallness, whereas *the same height as* can attribute tallness or shortness. This highlights a general worry about what a property is on this picture, i.e. why are tallness and shortness different properties? Similarly, it isn't clear why there couldn't be a property of near-emptiness, which would mean that (38a) and (b) don't attribute the same property to the same object – one could attribute emptiness and the other near-emptiness.

[16] This change in the definition of opposite argumentative orientation has an undesirable effect on A & D's account of the meaning of *but*. Remember that it was a necessary (and, in the case of non-scalar *but*, also sufficient) condition of the felicitous use of *but* that the two conjuncts should have opposite argumentative orientation without contradicting each other. When argumentative orientation was defined in terms of conclusions and two utterances were said to have opposite argumentative orientation if they supported opposite conclusions, (i) would have been ruled out, because it is hard to see what opposite conclusions could be supported by *Peter likes chocolate* and *Most birds can fly*.

(i) ?Peter likes chocolate but most birds can fly.

However, given A & D's new definition of opposite argumentative orientation, (i) should be acceptable, because the two conjuncts do indeed not attribute the same property to the same object to any degree whatsoever and the two conjuncts certainly don't contradict each other.

[17] It's interesting that, by this stage, A & D seem to have given up (or at least forgotten) the idea that different degrees of argumentative strength can also be attributed to arguments with different argumentative orientations (as allowed for by the law of inversion). If the new definition of argumentative strength given here is the whole story, A & D can no longer claim that there is such a thing as the scalar *but* discussed above – the law of inversion will no longer be applicable in cases

posed by (41a) and (b) without a change in the account of *nearly*, because even in those examples (38b), *the barrel is empty*, attributes a greater degree of emptiness to the barrel than does (38a), *the barrel is nearly empty*, and, therefore, (38a) and (b) have the same argumentative orientation and (38b) is a stronger argument than (38a) on the new definitions. It's just that in (41a) and (b) the two utterances can't support the same conclusion. It will become clear below that this change is the first step in the direction of topoi and topical forms.

3.4 Argumentative operators, topoi, topical forms and topical fields

3.4.1 Argumentative operators

In argumentation theory, expressions like *as ... as*, *nearly*, *but* and many others are referred to as 'argumentative operators' (e.g. Nyan 1998: 52)[18]. As the discussion above may have made clear, these argumentative operators can be seen as determining the argumentative orientation, or constraining the argumentative potential, of utterances. Thus, the presence of *as tall as* in (2) had the effect of adding the (argumentative) presupposed content (10b) to the meaning of the utterance. (1), on the other hand, which has the same asserted content as (2), but doesn't contain *as tall as*, doesn't carry this presupposed content.

(1) Peter is the same height as Mary.

(2) Peter is as tall as Mary.

Similarly, *nearly* in (38a) has been analysed as determining the argumentative orientation of its host utterance, in that it indicates that an utterance containing it has the same argumentative orientation as a corresponding utterance without *nearly*. This would be a banal observation if it wasn't for the fact that, from the point of view of informational content, 'nearly X' is equivalent to 'not X'. This is made even more interesting by the fact that the argumentative orientation of an utterance containing

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where two utterances don't attribute the same property to their objects, because the notion of argumentative strength only applies to utterances that attribute the same property.

[18] Nyan also uses the term 'metalinguistic operator'.

barely, e.g. (42), is the opposite of that of the same utterance without *barely*, e.g. (38b), in spite of the fact that 'barely X' is informationally equivalent to 'X'.

(38) a. The barrel is nearly empty.

b. The barrel is empty.

(42) The barrel is barely empty.

While (38a) and (b) support the conclusion in (39), (42) can, in the same context, only be used to support its negation, (43).

(39) We need to get a fresh barrel.

(43) We don't need to get a fresh barrel.

However, Nyan (1998: 52-3) shows that there are examples where there is an argumentative operator present but the operator doesn't seem to affect the argumentative orientation of the utterance[19].

(44) It's eight o'clock.

(45) It's only eight o'clock.

(44) and (45) could be said to have the same factual (or truth-conditional) content. However, (45) contains the argumentative operator *only*, while (44) doesn't. Given what was said above about argumentative operators constraining the argumentative orientation of the utterance containing them, one would expect (44) to be capable of being used as an argument in favour of some conclusions for which (45) cannot be used. However, Nyan claims that (46a) and (b) and (47a) and (b) show that both (44) and (45) can be used as arguments in favour of *hurry up* or *take your time*. In other words, both (44) and (45) are neutral from the point of view of argumentative orientation. Thus, the presence of *only* in (45) doesn't seem to make a difference to the utterance's argumentative potential.

(46) a. Hurry up: it's eight o'clock.

b. Take your time: it's eight o'clock.

(47) a. Hurry up: it's only eight o'clock.

b. Take your time: it's only eight o'clock.

As a matter of fact, at first glance, (47a) does not look terribly acceptable. However, if a suitable context is set up, it becomes perfectly acceptable. Imagine for example that Peter and Mary are going to a concert which starts at half past eight and it takes them twenty minutes to get there. Peter is not quite ready and has started slowing down, believing that it's quarter past eight and too late for them to make the first half of the concert. In this context it seems perfectly natural for Mary to utter (47a). As this shows, the presence of *only* in (45) doesn't necessarily make a difference to the range of conclusions that can be reached on its basis. Nevertheless, A & D feel that *only* does make a difference to the argumentative content of (45). The notions of 'topos' (based on Aristotle's notion) and 'topical form' were introduced to capture the difference in argumentative content between (44) and (45). These notions take further the ideas behind the new definitions discussed in 3.3.5.

3.4.2 Topoi and topical forms

According to Moeschler & Reboul (1994:317-322) and Nyan (1998: 52-59), a topos is an argumentative rule shared by a given community (which need have no more members than the speaker and the hearer). This argumentative rule is used to license the move from an argument to a conclusion. It is an important feature of topoi that they are scalar in nature. The general form of a topos is given in (48).

(48) The more/less object O possesses property P, the more/less object O' possesses property P'.

As Moeschler & Reboul (1994: 317) point out, if one assumes that proposition A = 'object O possesses property P' and proposition B = 'object O' possesses property

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[19] In fact, it's unclear whether it does or doesn't on the definition of argumentative orientation

P'', then a topos can have the four forms in (49a)-(d), with (49a) reading "the more O is P, the more O' is P'", (49b) "the less O is P, the less O' is P'", and so on.

(49) a. <+A, +B>
b. <-A, -B>
c. <+A, -B>
d. <-A, +B>

If we assume that A is something like 'the weather is warm' and B 'the beach will be pleasant', the four possible topical forms will be something like (50a)-(d).

(50) a. (The warmer the weather)$_{+A}$, (the more pleasant the beach)$_{+B}$.
b. (The colder the weather)$_{-A}$, (the less pleasant the beach)$_{-B}$.
c. (The warmer the weather)$_{+A}$, (the less pleasant the beach)$_{-B}$.
d. (The colder the weather)$_{-A}$, (the more pleasant the beach)$_{+B}$.

As (50) illustrates, there are two incompatible underlying topoi to each set of topical forms. Thus, a speaker who accepts (50a) (or (49a) in the general case) will also have to accept (50b) (or (49b)), but she will not be able to accept (50c) or (d) (or (49c) or (d)). In Anscombre & Ducrot's (1989: 83) terminology (49a) and (b) are 'converse' topoi (*topoi inverses*), as are (49c) and (d). Nyan (1998: 55) refers to the topos underlying (50c) and (d) ((49c) and (d) in the general case) as "the converse topos". Moeschler & Reboul (1994: 317) use the expression 'contrary topoi' (*topoi contraires*) to refer to the two incompatible topoi underlying (49a,b) and (49c,d) respectively. To avoid confusion I'll refer to incompatible topoi as contrary topoi.

Different sequences from argument to conclusion will be licensed by different topoi. Let us call the topos underlying (50a) and (b) T1 and the topos underlying (50c) and (d) T2. In that case, the sequences in (51) and (52) will be licensed by T1, while those in (53) and (54) will be licensed by T2.

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discussed in 3.3.5, because it isn't clear what property (44) and (45) attribute to what object.

(51) It's warm. Let's go to the beach.

(52) It's not warm. Let's not go to the beach.

(53) It's warm. Let's not go to the beach.

(54) It's not warm. Let's go to the beach.

So, how do the notions of topos and topical form solve the problem that examples (47a) and (b) present for the argumentative operator *only*?

Recall that the curious thing about (47a) and (b) is that the presence of the argumentative operator *only* doesn't seem to make a difference to the argumentative potential of its host utterance, since both (47a) and (b) are acceptable, just like their operator-free counterparts (46a) and (b).

(46) a. Hurry up: it's eight o'clock.

b. Take your time: it's eight o'clock.

(47) a. Hurry up: it's only eight o'clock.

b. Take your time: it's only eight o'clock.

Let us first look at the different topical forms underlying the sequences in (46) and (47). They are given as TF1-TF4 in (55).

(55) TF1: The more time one has, the more one needs to hurry.

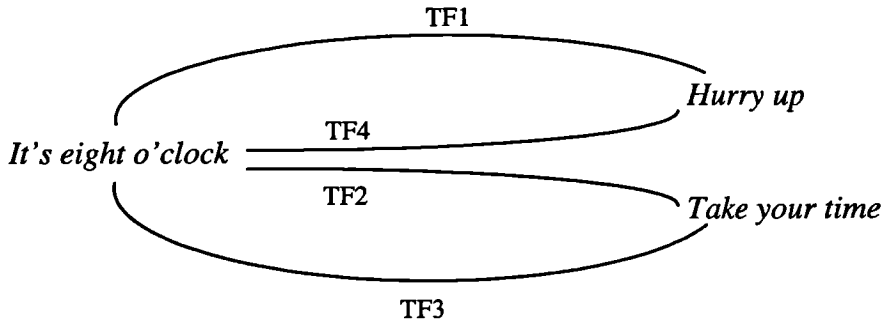
TF2: The less time one has, the less one needs to hurry.

TF3: The more time one has, the less one needs to hurry.

TF4: The less time one has, the more one needs to hurry.

The interesting thing now is that (46) and (47) cannot both be licensed by the same set of topical forms. (46a) can be licensed by TF1 or TF4 and (46b) by TF2 or TF3. In other words, the argument *it's eight o'clock* can lead to the conclusion *hurry up* via two different routes and the same goes for the conclusion *take your time*. This is illustrated in (56).

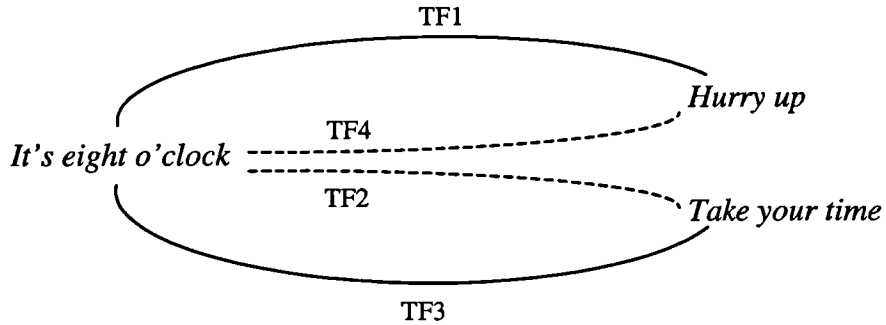
(56)



(adapted from Moeschler & Reboul 1994: 319)

The case of (47), however, is different. (47a) can only be licensed by TF1 and (47b) only by TF3. Thus, as illustrated in (57), the presence of the argumentative operator may not restrict the class of conclusions reached but it does restrict the route taken to reach those conclusions.

(57)



(adapted from Moeschler & Reboul 1994: 319)

3.4.3 Topical fields

The introduction of topical forms means that A & D (e.g. 1989) no longer want to capture the meaning of utterances in terms of asserted and presupposed contents assigned to deep structures. Rather they see the meaning of the deep structure as "the set of topoi whose application is said to be valid when uttered" (A & D 1989: 80). They (1989:81) describe linguistic predicates as bundles of topoi and they introduce

the notion of topical field for networks of topoi.[20] Thus, the meaning of a predicate like *work*, for example, is given by a bundle of topoi involving gradations of work. Some topoi that could be part of the meaning of *work* are given in (58).

(58) a. The more work, the more success.
b. The less work, the more relaxation.
c. The more work, the more fatigue.
d. The less work, the more happiness.[21]

Another way of looking at this would be to say that gradations of work are linked, via different topoi, with a series of other gradations, e.g. of success, relaxation, fatigue and happiness. These gradations, in turn, are themselves linked to different gradations still. For instance, gradations of happiness could be linked with gradations of health, appetite, etc. This network of gradations, linked via an infinite number of topoi, is what A & D (1989: 81) mean by a topical field.

It is interesting to note at this point that A & D (1989: 82) "in no way claim that all individuals of the same linguistic community share the same topical field, nor even that a given individual always uses the same one." This seems to raise the question as to whether any linguistic predicate can ever have a meaning stable across a linguistic community (and even for the same individual across time). Unfortunately, A & D do not discuss this point.

Obviously, these developments of AT bring with them accounts of examples, like (2), that are quite different from the accounts given in earlier AT.

(2) Peter is as tall as Mary.

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[20] As they put it: "A sort of topical field is then substituted for the usual lexical field" (A & D 1989: 81). I assume that what is meant by "the usual lexical field" is the neo-Saussurean notion, discussed, for example in Lyons (1977: 250-261), i.e. a structured collection of lexemes which cover a conceptual field, e.g. that of colours or 'knowledge and understanding'.

[21] As a matter of fact, not only these topoi are linked with *work*, but also their opposites, i.e. 'the less work, the more success', 'the more work, the more relaxation', 'the less work, the more fatigue', etc. This makes the AT conception of meaning seem somewhat bizarre, as the meaning of the predicate *work* contains contradictory parts. What is more, the information given by the topoi looks much more like world knowledge than linguistic knowledge and it is not clear that world knowledge should or could be part of linguistic meaning.

On their revised account of (2)[22], Anscombre & Ducrot (1989: 83-85) analyse the deep structure underlying the utterance as requiring that Peter and Mary should be located at the same degree of the initial gradation of tallness in all topoi that link tallness with other gradations, like for instance 'the taller, the better at basketball', 'the taller, the more clumsy', etc. In other words, it is part of the meaning of (2) that any conclusion that can be drawn from Mary's location on the scale of tallness can also be drawn from Peter's location on the same scale and vice versa.

Probably the most important aspect of the move from asserted and presupposed contents to topical fields is the fact that it is also a move from a semantics with some truth-conditional (i.e. asserted contents) and some non-truth-conditional elements (i.e. argumentative presupposed contents) to one which is wholly non-truth-conditional. As will be seen in the next section, this move is highly questionable and creates some very serious problems for AT.

3.4.4 New definitions of central AT notions

The introduction of topoi and topical form to replace the idea that the meaning of utterances can be captured in terms of the conclusions for which they can be used as arguments means that the definitions of the central notions of AT, such as argumentative orientation and argumentative force, given in previous sections can no longer be correct. It is therefore remarkable that nowhere in A & D's work (as much of it as is available to me at least) have I been able to find any explicit reformulations of the basic AT definitions. Because it seems important to have at least some idea of how A & D would (or could) now define the notions of argumentative orientation and argumentative strength, I will attempt a guess on the basis of their slightly revised definitions discussed in 3.3.5.

Where in A & D (1983: 167) they said two utterances would have opposite argumentative orientations if they didn't attribute the same property to the same object to any degree whatsoever, it seems possible that they'd now say that two utterances have opposite argumentative orientations if they are linked to topoi with

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[22] Presumably, the same would hold for (1).

different initial gradations and, maybe, converse second gradations, like for example T and T' in (59).

(59) T: The nicer the weather, the more pleasant a walk.
T': The more work one has to do, the less pleasant a walk.

Now, T could be seen as underlying the first conjunct in (60) and T' the second, and indeed, since *but* can felicitously link the two conjuncts in (60), they would have been said to have opposite argumentative orientations on A & D's old definitions.

(60) The weather is nice, but I have a lot of work to do.

It's a little less hard to see how the notion of argumentative strength would be defined now. In A & D (1983: 166), they say that an utterance u_2 will be argumentatively stronger than utterance u_1 if they both attribute the same property to the same object and if u_2 does so to a greater degree than u_1. The only way I can see in which this could be translated into terms of topical forms is that u_2 will be argumentatively stronger than u_1 if u_2 places its object higher than u_2 on the initial gradation of all topoi linked with the utterances. Thus, (61b) will be stronger than (61a), because the former places its object (i.e. the weather) higher on the gradation of niceness than the latter.

(61) a. The weather is nice.
b. The weather is very nice.

3.5 The end of informational contents

3.5.1 Introductory remarks

As mentioned above, Anscombre & Ducrot (1989) constitutes a move away from the earlier AT position where argumentative contents were seen as an integral part of the semantic structure of the deep structures underlying utterances, but not the only kind of content; informational or truth-conditional (asserted or factual) contents were also

part of the semantic structure of utterances. In their own words, A & D (1989: 77/79) move from a position of considering "argumentation as a component of meaning" to one of "radical argumentativism". As will be seen shortly, this move has some very far-reaching and ultimately, I believe, undesirable implications. However, first of all, let us look at the justification A & D (1983, 1989), and especially Ducrot (1993), give for this move.

3.5.2 Ascriptivism

The idea that the argumentative function of language, and thus the argumentative aspects of linguistic meaning, should be seen as primary first seems to emerge in chapter 7 of A & D (1983). In this chapter, A & D (1983: 169) say that, even though so far their accounts had made it look as though they saw language as having two separate functions, namely an informative one and an argumentative one, they really want to work towards a position where the argumentative function of language, and with it argumentative meaning, is primary and the informative function of language secondary. In that sort of an account, any informational (or truth-conditional) meaning would be derived from an underlying argumentative meaning. The wish to give such an account seems to stem from the view that many utterances, like for example those in (62)-(64) below, which look as if they are purely informative, i.e. as if they describe some objective state of affairs or other, do not, in fact, describe any such state of affairs.

(62) Peter is intelligent.
(63) This hotel is good.
(64) This act is voluntary.

A & D (1983: 169-174) maintain that the assumption that, for example (62), is a description which predicates the objective property 'intelligent' of Peter is wrong. This, they say, would presuppose that there is a state of affairs in the world which would make (62) true or false, and that there is an objective concept 'intelligent'. A & D believe that there is no such concept, or, if there is a scientific concept, for example based on the notion of IQ, that concept would not capture the meaning of

the natural language word *intelligent*. Instead, A & D (1983: 170) want to follow in the footsteps of 'ascriptivists', like Hare (1952), who would account for the meaning of (62) by saying that it is used to praise Peter, the meaning of (63) by saying that it is used to recommend the hotel, and the meaning of (64) by saying that it is used to attribute responsibility for the act to the agent.

A & D's (1983: 172) account, though in the same spirit as the ascriptivist view, is slightly different. They suggest that utterances like (62)-(64) should be accounted for in purely argumentative terms. That is, according to them, the meaning of (63), for example, should be captured by saying that the utterance can be used as an argument in favour of a conclusion *r*, with *r* being something like 'favourable view of the hotel'[23]. There are two potential problems with this, both of which have been used as arguments against ascriptivism (see e.g. Searle 1969: 136-141; Geach 1972: 250-269).

The first problem is that it is very easily possible to utter something like (63) without recommending the hotel. Thus, (65) is perfectly acceptable.

(65) This hotel is good, but I don't recommend it.

A & D (1983: 172) avoid this problem by saying that it is the meaning of (63) that it **can** be used as an argument for a favourable view of the hotel, which does not mean that it actually always has to lead to that kind of conclusion. In fact, they argue that the very presence of *but* in (65) indicates that the two conjuncts are arguments for opposite conclusions[24] and that this supports their view.

The second, graver, problem is that utterances like (63) can be used in syllogisms, like the one in (66).

(66) a. If this hotel is good, it is expensive.
b. This hotel is good.
c. Therefore, it is expensive. (A & D 1983: 172)

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[23] This shows that A & D started thinking about abandoning informational contents before they'd introduced the notions of topoi and topical forms, at a time when they still defined the central AT notions in terms of conclusions, rather than topoi.

[24] see fn. 23

The problematic point here is the conditional in (66a). It seems unlikely that the meaning of the antecedent here can be captured by saying that it is an argument for a favourable view of the hotel (or that it is used to recommend the hotel). However, if the meaning of the antecedent is different from that of (66b), the argument can't go through. Anscombre & Ducrot (1983: 173) offer a solution involving the notion of 'delocutivity' (*délocutivité*). An expression E_2 is derived from an expression E_1 via delocutivity if the form of E_2 is based on that of E_1 but the meaning of E_2 is based, not on the encoded meaning of E_1 (i.e. its semantic value), but on some pragmatic value connected with the utterance of E_1.

A & D now maintain that there is an E_2: *X is good* which attributes a certain property to X and which is derived, via delocutivity, from an E_1: *X is good* which has as its meaning that it is an argument for a favourable view of X. According to them, a general law of discourse states that any utterance which is used to argue for something presents itself as being justified by a property of the object with which the argumentation is concerned. After all, A & D believe, if one takes the trouble to argue for a favourable view of an object, then this object must have certain properties which justify the argument. It is this 'pragmatic' aspect of the utterance of E_1: *X is good* that gets transferred to the expression E_2: *X is good.* The idea is now that syllogisms, like the one in (66), contain expression E_2, which does attribute a property to an object, and not E_1, from which E_2 is derived. Before moving on, let me point out some difficulties with this account.

A major worry, which will no doubt have struck the reader, is that the delocutivity account of *is good* is completely counterintuitive. It seems odd, to say the least, that the *is good* that attributes a property to objects is derived from the *is good* that is an argument for a favourable view, rather than the other way around. From a more theoretical point of view, there are two ways of construing A & D's account. The first is that they are saying that *is good* has just one meaning (i.e. that it has a unitary semantics), namely that the utterance is an argument for a favourable view of its object(s), and that the delocutive meaning has to be derived (pragmatically) on certain occasions. The problem with this is that the delocutive meaning will have to be derived on many occasions. What is more, it isn't clear how the meaning of *good* in utterances like (67) could be accounted for.

(67) Good hotels are hard to come by.

It seems obvious that it isn't part of the meaning of (67) that it is an argument for a favourable view of the hotel, but it isn't clear how a hearer could work out on the basis of (67) that *good* here attributes a certain property to an object if that isn't part of the meaning of *good.*

The second way of construing A & D's delocutivity account is that it amounts to the postulation of an ambiguity in *is good.* However, this is completely unnecessary, because, if the meaning of *is good* were assumed to be that it attributes certain positive properties to objects, it would fall out quite naturally that an utterance containing such an attribution is often an argument for a favourable view of the objects. Admittedly, there is still a question about what property exactly it is that *is good* does attribute – a possible answer to this will be discussed in 4.5.1.

In spite of the fact that A & D (1983, ch. 7) say they want to move towards a completely non-truth-conditional semantics, which is based on the view that no meaning is primarily descriptive or informational, they (1983: 169) admit that there are a number of utterances, like for example (68)-(70), which seem to be irreducibly informative, and for which they can't account in purely argumentative terms.

(68) The table is square.
(69) The tablecloth is red.
(70) Peter has arrived. A & D (1983: 169)

As a matter of fact, it's less than obvious that (68)-(70) are radically different from (62)-(64). What counts as square and what as red varies across circumstances, purposes and individuals, so that the property communicated by utterances such as (68) and (69) is no more fixed or objective than the properties communicated by *intelligent, good* and *voluntary.*

3.5.3 Radical argumentativism

3.5.3.1 Examples

Ducrot (1993: 88) goes further than A & D (1983) in his rejection of truth-conditional meaning. He maintains that no part of meaning is purely objective, i.e. not touched by any, as Ducrot puts it, "pragmatic intentions" (*intentions pragmatiques*). Note, though, that the examples Ducrot (1993: 89) uses are very close to (62)-(64), the examples used by A & D (1983) to show that some utterances could be accounted for in purely argumentative terms, but not to (68)-(70), the examples A & D (1983) give of purely informative utterances. In other words, Ducrot does not address the examples that one would expect to be addressed by someone making the 'no objectivity' claim. The first set of Ducrot's examples are given in (71) and (72).

(71) The film was interesting.

(72) The meeting was pleasant.

As with (62)-(64), the argument is that there simply are no objective properties 'interesting' or 'pleasant' and that, therefore, it is impossible to capture the meaning of (71) and (72) in truth-conditional terms. From this, Ducrot (1993: 89) concludes that the meaning of these two utterances must be given in purely argumentative terms. As will be discussed below, I don't believe that the move from the assumption that the meaning of a certain expression is not an objective (fixed, determinate) concept to the assumption that it must be non-truth-conditional (or, at least, that there is no state of affairs corresponding to the concept conveyed by the expression on a given occasion) is legitimate. Nor do I believe that the move from the assumption that the meaning of a certain expression is non-truth-conditional to the assumption that it must be argumentative is acceptable. Nevertheless, the point that there is no single objective property 'interesting' or single property 'pleasant' is valid and any account of the meaning of words like *interesting* and *pleasant* will have to take this into account.

Ducrot's next two examples, also intended to demonstrate the impossibility of giving truth conditions to utterances, require a greater leap of the imagination. The

first one of these is given in (73), uttered by a parent to a child who is getting a bit too close to a dog.

(73) Don't touch: it's dirty.

Ducrot (1993: 89) is interested in the indicative *it's dirty*. He claims that the meaning of this is not, as one might expect, that it gives a description of the dog, but rather that it is an argument for not touching it. Ducrot starts by saying that for the child, *it's dirty* can't be a description of the dog, because the child doesn't know anything about the adjective *dirty*, other than that it is used as a justification for orders not to touch, not to eat, or, more generally, to stay away from things. He admits that the parent uttering (73), will see *it's dirty* as a description of the dog which is part of an argument with the conclusion *don't touch.* However, Ducrot believes that this is an illusion, because the parents would find it difficult to define dirtiness in terms which don't allude to the fact that it justifies forbidding things.

The final example Ducrot (1993: 89) uses is (74), which should be imagined as uttered by a speaker who is trying to get the hearer to do something.

(74) Be reasonable.

Ducrot believes that (74) is not a case of a proposition (*the hearer is reasonable*) being uttered with directive illocutionary force as the standard speech act account would have it (e.g. Searle 1979). According to Ducrot, the semantic value of the adjective *reasonable* consists in the fact that it presents an act as one that must be performed. In other words, for Ducrot (1993: 89-90), the meaning of *reasonable* is purely argumentative; the word does not encode a propositional constituent. His justification is that he can't see what propositional constituent that could be.

Ducrot's accounts of *is dirty* in (73) and *be reasonable* in (74) are both incredibly counterintuitive. I, for one, have no difficulty at all in thinking of a definition of dirtiness which has absolutely nothing to do with forbidding things. In fact, a quick glance at any dictionary of English (or French, or any other language with a word corresponding to *dirty*) will show that there are numerous definitions of dirtiness which don't have anything to do with forbidding things. Similarly, I can see

reasonably easily what fragment of a proposition *reasonable* could encode (and, again, I'm sure most dictionaries would be on my side). Furthermore, if the meaning of *be reasonable* is described exhaustively by saying that it describes acts as ones that must be performed, what is the meaning of an utterance like (75)?

(75) Susan has always tried to be reasonable.

To return to Ducrot, after using the examples discussed above to argue against a truth-based semantics, he goes on to state how a purely argumentative semantics could work. For this, he uses the notion of topos introduced above, and the notion of polyphony, which will be discussed briefly here.

3.5.3.2 Polyphony

Polyphony is a central notion of AT. It is based on the idea that the views of more than one person can be behind a text or utterance. This idea was first explored in literary criticism, e.g. by Bakhtin. According to Ducrot (1984: 173), his own work is an extension of Bakhtin's from literary criticism into linguistics. In what follows, a brief description of polyphony in linguistics will be given, along with some of its applications in AT. I will also mention some criticisms of Ducrot's linguistic theory of polyphony.

According to Ducrot (1993: 90), the meaning of an utterance consists in a characterisation of its own uttering. This uttering is characterised as the confrontation of different 'voices' or 'points of view', which interact with each other. The idea is that the (usually unique) speaker (*locuteur*) doing the uttering stages a dialogue inside her own monologue between different points of view (*énonciateurs*). It is important to note that neither *locuteur* nor *énonciateurs* are construed as real people. Rather, Moeschler & Reboul (1994: 326) stress that they are theoretical constructs, although actual people can get to be identified with *locuteurs* and

énonciateurs. This notion that every utterance is a manifestation of different interacting points of view is what is referred to, in AT, by the term 'polyphony'[25].

The following are some of the linguistic phenomena which, according to Ducrot (1984), exhibit the points of view of more than one (theoretical) individual (or of someone other than the individual who is actually doing the uttering): direct and indirect reported speech, ironical utterances, utterances containing *but* and negative utterances. The most obvious of these are cases of reported speech, be it direct reported speech, as in (76a), indirect reported speech, as in (76b), or free direct reported speech, as in (76c).

(76) What did Mary say?

a. She said: "I like you".

b. She said she liked me.

c. I like you.

(76a) and (b) clearly represent the points of view of both the actual speaker (say, Peter) and Mary. (76c), although physically uttered by Peter, actually represents Mary's point of view.

On Ducrot's (1984: 210-213) account, if (77) is uttered ironically, it will represent not the actual speaker's view, but somebody else's (whether that person actually uttered the words or not and whether there actually is a specific person whose view is being expressed or not)[26].

(77) Life is beautiful.

In an utterance containing *but*, the presence of two different points of view makes itself felt in a different way. Remember that A & D analyse *but* as indicating that the two conjuncts have opposite argumentative orientations. Thus, *Peter is rich* will have opposite argumentative orientation to *I like him* in (78).

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[25] For a discussion of polyphony see also Moeschler & Reboul (1994: 323-347), Nyan (1998: 60-63) and Zagar (1999).

[26] Ducrot's account of irony is based on Sperber & Wilson (1978).

(78) Peter is rich but I like him.

Remember also that, at least in earlier AT, two utterances were said to have opposite argumentative orientations if they were arguments for opposite conclusions. In (78), *Peter is rich* could, for example, be an argument for *I don't like Peter*, whereas *I like him* clearly is an argument for *I like Peter*. Now, the point is that one and the same person (or theoretical individual) can't argue for *I like Peter* and *I don't like Peter* at one and the same time[27].

Finally, negation is the simplest example of polyphony, according to Ducrot. The idea is that every utterance containing a negation involves the presentation of at least two points of view: the positive counterpart of the utterance and the negative utterance itself. Thus, (79), taken from Nyan (1998: 60), will be analysed as comprising the two viewpoints in (80a) and (b).

(79) Ludwig isn't an ordinary dog.

(80) a. Ludwig is an ordinary dog.

b. Ludwig isn't an ordinary dog.

In most cases, the speaker will be seen as identifying with the viewpoint in (80b), but in cases of irony, for example, the speaker will be seen as identifying with (80a). This might be seen as a good way of accounting for the intuition that utterances containing negations always also make immediately accessible their positive counterparts.

The biggest problem with Ducrot's linguistic notion of polyphony, as pointed out by Moeschler & Reboul (1994: 332-333), is that it leads to an incredible proliferation of theoretical entities: Not only can each utterance comprise a multitude of *énonciateurs* and more than one *locuteur* on a basic level, but Ducrot (1984: 224) also conceives of cases where first-level *énonciateurs* are manipulated by higher-level *énonciateurs*. What's more, this proliferation of theoretical entities wouldn't be necessary if, instead, a notion were developed of real people representing other (real)

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[27] I am here deliberately reverting back to the 'old' AT definition of argumentative orientation, since neither Nyan (1998) nor Moeschler & Reboul (1994) give an account of *but* using the notions of topoi and topical form.

people's thoughts and utterances (or, indeed, thoughts and utterances which are not attributed to anybody in particular)[28].

3.5.3.3 Some radical consequences of radical argumentativism

Overall, the picture Ducrot (1993) paints is the following. All linguistic meaning can be captured in purely argumentative terms. That is, every utterance can be described as a collection of topoi, which constitute different points of view, and there is nothing about language as such that is informative, i.e. language is not cut out to be used to describe states of affairs. As Ducrot (1993: 96) points out, this gives rise to some important questions.

The first question Ducrot mentions is this: if language really does not say anything true or false about the world, how come speakers believe that they are using language to give true descriptions of the world (at least sometimes)? Ducrot's (1993: 97) answer to this question is that speakers' (and hearers') impression that language is informative is an illusion.

The second question he raises is: given that linguists use language to describe how language works and given that that language (as assumed by Ducrot) cannot say anything about the world, how can linguists ever say anything true about language? Ducrot (1993: 97) first notes that this question is too important and too far-reaching in its implications for it to be answered in a few words. He then considers the possible answer that linguists should try to construct a metalanguage which is descriptive in nature (a logical language, such as the predicate calculus, for example). After stating that this is what all linguists, including himself in the present chapter, are trying to do, he says that he feels that it is an impossible task. Finally, he concludes that linguistics should be seen, not as a scientific discipline, but as an essentially critical one and that the aim of semantics should not be to try and describe the actual meaning of utterances but to destroy the illusion that utterances convey information about things. In his own words:

> Une deuxième issue possible est de fixer à la sémantique linguistique un objectif essentiellement *critique*:.[sic] Elle ne viserait pas à décrire ce que

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[28] cf. Sperber & Wilson's (1995: 224-231) notion of interpretive use.

signifie *vraiment* le discours: elle viserait seulement à détruire l'illusion sans cesse renaissante selon laquelle le discours donnerait des informations sur les choses. Elle enseignerait avant tout à se *méfier* de la parole.

Ducrot (1993: 98, his emphasis)

3.6 AT evaluated

So far in this chapter I have sketched the beginnings of AT, its most important developments and the point it seems to have reached at present. At each stage, I have pointed out problems with A & D's accounts either in footnotes or in the body of the text. In this section, I would like to recapitulate some of the problems mentioned earlier and expand on those that have merely been hinted at. First, however, let me mention some of AT's strong points.

Without a doubt, a lot of good, analytical work has been done within the framework of AT and, in its earlier forms, it is based on some interesting observations. Argumentation Theory is obviously right, and certainly not alone, in noticing the existence and the importance of non-truth-conditional aspects of linguistic meaning, and in pointing out the existence of words whose meaning is essentially subjective, like *interesting*, *pleasant*, etc. Anscombre & Ducrot's work highlights some very interesting linguistic phenomena, such as the difference between *as tall as* and *the same height as* discussed above, the difference between *little* and *a little* discussed in A & D (1989: 82-83), and the difference between *he is 36* and *he is only 36* (Nyan 1998: 52). These are all phenomena a successful semantic theory will have to account for. A & D's (e.g. 1976 & 1983) accounts of the meaning of *but* and *even* are particularly insightful. Finally, there is the idea, discussed for example by Zagar (1999:1-2), that utterances like (44) are not usually made just to let a hearer know what time it is, but also to communicate something else, for example any of (81a)-(d).

(44) It's eight o'clock.

(81) a. Hurry up!

b. Take your time!

c. Turn on the radio!

d. Go brush your teeth!

(from Zagar 1999: 2)

Clearly, this idea has been widely accepted by linguists and philosophers of language, at least since Grice. However, it is doubtful whether topical forms, which are part of the meaning of the deep structure underlying an utterance, are the right tool for explaining this phenomenon. Now, let me move on to some of my worries with AT.

As argumentation theorists would no doubt be the first to agree, in AT's earlier incarnations there were problems with specific definitions, especially those of argumentative potential, argumentative orientation and strength, when they were couched in terms of conclusions. Furthermore, at the stage where A & D accounted for the meaning of utterances by assigning asserted and presupposed content to their underlying deep structures there was a proliferation of mechanisms, laws and axioms whose existence wasn't always independently justified (for instance, the law governing the use of *even* discussed in section 3.3.4). Another worry at that stage in the theory's development was that the compositionality of the meaning of deep structures was only guaranteed to the level of core deep structures, whose meaning could not be decomposed further. In other words, the contribution made by individual lexical items that are not argumentative operators and the syntactic structure of the sentence are not addressed.

The intermediate step of introducing the notion of act of arguing solved some of those problems but also created some new ones, notably for A & D's account of the meaning of *but*. However, it is the last step in the development of AT, namely the introduction of topoi and topical forms along with abandoning any kind of informational, descriptive or truth-conditional contents, which has created the most serious problems for the theory. In particular, I will here discuss two problems with later AT.

The first is this: Given that the meaning of each utterance merely provides an entry point to a topical field and thus gives access to an infinite number of topoi, how can it be that any conclusions are ever reached? For example, an utterance like (82) gives access to a multitude of topoi, including T1: 'the warmer the weather, the nicer

the beach', T2: 'the warmer the weather, the less pleasant the work', T3: 'the warmer the weather, the shorter the skirts', etc., and their opposites.

(82) It's hot.

How do A & D explain that, on any given occasion, competent hearers are usually able to figure out which conclusion(s) the speaker is intending him to draw (and, therefore, which topoi to use). Furthermore, how does the hearer know that it's the weather the speaker is talking about and not the food the hearer has just placed in front of her? And how does the hearer know that with the word *hot* the speaker meant to describe the temperature and not the spiciness of the food? Clearly, these are the questions a pragmatic theory is traditionally expected to answer. However, A & D's integrated pragmatics does not seem to address, much less answer them. What is needed here is clearly a non-integrated pragmatics, a notion for which A & D do not seem to make any provision. At this point an argumentation theorist might protest: This criticism isn't fair, because A & D never set out to answer the questions above; AT is strictly a semantic theory. Let's assume that this is so, even though A & D do not explicitly state it anywhere. In that case, one would expect AT to meet the basic requirements of a semantic theory, such as compositionality. However, if the meaning of predicates is given by bundles of topoi, it is not clear how the compositionality requirement can be met. Furthermore, while AT does offer accounts of the meaning of predicates like *work* and argumentative operators like *but*, it is not clear how the meaning of other linguistic elements, such as referential expressions, quantifiers, tense, etc., would be characterised in AT. However, these are small worries compared with the second problem I want to discuss here.

In a nutshell, a theory which ends up saying that language cannot be used to describe the world, be it the actual or some other possible world, and doesn't have a good explanation of why it is that people nevertheless not only believe that language is used to convey information but are also prepared to act on information they have been given by purely linguistic means, simply cannot be adequate. After all, people act on purely linguistically conveyed information all the time. For example, I go to the station for 11 o'clock because my friend has told me that her train arrives at eleven, and she is quite likely to have gone to the station at a certain time at her end

because someone told her there'd be a train then. More generally, and more importantly, there are many things we only know today because someone wrote them down or told them to someone else. If our impression that we are conveying information using language is just an illusion, it must be an illusion so strong and widespread that every single human in the world not only believes in it but also regularly acts on it. As mentioned above, the step from recognising the existence of non-truth-conditional meaning to abandoning the notion that language is used to represent the world is not supported with enough evidence. What is more, even if the meaning communicated by most words is subjective, this does not mean that the notion of truth conditions has to be abandoned altogether.

These two problems with later AT show that the theory is let down by its failure to make a principled distinction between semantics and pragmatics and by its resolutely anti-cognitive stance. In the next chapter I will look at how a cognitive theory with a clear semantics/pragmatics distinction can solve problems concerning linguistic subjectivity without discarding the notion of truth conditions or the idea that people use language to convey information about the world, while at the same time acknowledging that this is not all language is used for. I will show that and how Sperber & Wilson's (1986) Relevance Theory can account for the fact of 'subjectivity' without throwing out the representational baby with the subjective bath water.

3.7 Ending on a conciliatory note

In spite of the problems with, particularly later, AT just discussed, there is much that the theory shares with other theories of utterance meaning or interpretation. For instance, Griceans, relevance theorists (and any other pragmatist worth their salt) would agree that utterances like (44) are not usually made just to inform the hearer of the time and that, indeed, speakers are likely to want to convey something additional, e.g. any of (81a)-(d).

(44) It's eight o'clock.

(81) a. Hurry up!

b. Take your time!

c. Turn on the radio!

d. Go brush your teeth!

As mentioned above, AT explains this phenomenon with the help of scalar topoi, which are part of the meaning of (44), licensing the conclusions in (81). Obviously, a Gricean would explain it in terms of the Co-operative Principle and conversational maxims. Thus, a Gricean might say that a hearer must assume that a speaker uttering (44) also means any of the things in (81) in order to preserve the assumption that the speaker is observing the Co-operative Principle and conversational maxims. It will be seen in the next chapter that RT has a different, cognitive, explanation. What primarily distinguishes the AT approach from others is that its topoi are necessarily scalar and are seen as part of the (semantic) meaning of (44). While it isn't clear that this scalarity is actually necessary in cases like (44), in other utterances, e.g. those involving *even*, it does, indeed, seem to play a central role.[29]

In sum, while there is much that seems problematic about AT, there is also much that is valuable. In particular, when it comes to the analysis of specific 'non-truth-conditional' expressions one might do well to take heed of A & D's insights and intuitions. Indeed, it will be seen in chapter 5 that their account of *but*, in particular, has been ground-breaking and deservedly influential.

[29] See chapter 7.

CHAPTER 4
RELEVANCE THEORY AND 'NON-TRUTH-CONDITIONAL' MEANING

4.1 Introduction

In chapter 1, I discussed various linguistic expressions that have been classed as having 'non-truth-conditional' meaning and, in chapter 2, I looked at the ways in which some theorists have attempted to accommodate them in their still essentially truth-conditional frameworks. The conclusion I reached was that the notion of non-truth-conditional meaning doesn't cover a natural class of expressions and that calling an expression 'non-truth-conditional' isn't a theoretically useful way of describing it. Chapter 3 gave an overview of the ultimately completely non-truth-conditional account of utterance meaning provided by Argumentation Theory with the many problems that brings with it. In this chapter I'll introduce the cognitive pragmatic framework of Relevance Theory (RT). I will show that this framework enables the theorist to account for the meaning of all linguistic expressions regardless of whether (and when) they contribute to the truth-conditional content of the utterances in which they occur.

First, I'll introduce the relevance-theoretic view of communication and utterance interpretation. This will motivate the existence of two different types of information a linguistic device can encode: conceptual and procedural. This semantic distinction will be explored in section 4.3. Section 4.4 is devoted to the ways in which assumptions can be communicated, i.e. explicitly or implicitly. I'll argue that the conceptual/procedural distinction captures a fundamental semantic difference between two types of linguistic phenomena, while the (pragmatic) distinctions between implicitly communicated and two types of explicitly communicated assumptions explain when and whether a given expression contributes to the truth-conditional content of an utterance. In section 4.5, I'll take another look at the notion of truth conditions and I'll suggest that it's possible and, indeed, desirable to give an account of utterance meaning that doesn't rely on the notion at all, at least not in the way in which it has been explicated in chapter 1. Finally, in section 4.6, I'll suggest how RT can be, and has been, used to account for the 'non-

truth-conditional' phenomena listed in chapter 2 without having recourse to describing them as truth-conditional or non-truth-conditional.

4.2 Relevance and (ostensive) communication

4.2.1 The cognitive principle of relevance

Within the framework of Relevance Theory (RT), linguistic communication is seen in the broader context of human cognition and ostensive communication in general. The basic idea is that humans are predisposed to pay attention to relevant stimuli. This is captured in the cognitive principle of relevance, according to which human cognition is geared towards maximising relevance (Sperber & Wilson 1986/1995: 46-50; 261-263). In absolute terms, a stimulus is relevant to a cognitive system at time *t* iff the information it carries interacts with information already within the system at *t* in one of three basic ways[1]. The result of this interaction is called a **cognitive effect** in RT. The three main types of cognitive effect are illustrated in (1)-(3).

(1) Joan is lying in bed. She can hear a patter on the roof and concludes that it's raining. She gets up, opens the shutters and sees that it is indeed raining.

In the scenario in (1), the new information Joan gains from looking out of the window interacts with a belief she's already formed. The new information, i.e. *it's raining*, **strengthens** an existing assumption of Joan's, namely the assumption that it's raining.

(2) As before, Joan is lying in bed. Given that there's no audible patter on the roof she assumes that it isn't raining. Again, she gets up and opens the shutters and she sees that it's raining.

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[1] There may well be more ways in which new information can interact with old. For instance, it's conceivable that some new information, rather than giving rise to a contextual implication, strengthening or contradicting and eliminating existing assumptions, leads to a reorganisation in the information already stored in the memory. More emotional types of effects, such as making somebody feel good, are also conceivable. However, the three types of effects described above are those usually cited in the literature

In (2), again the new information, *it's raining*, interacts with an existing assumption of Joan's, namely that it isn't raining. Here, the new information **contradicts and eliminates** Joan's existing assumption.

(3) Again, Joan is lying in bed. She decides that if it's raining she won't go for a run. She gets up, opens the shutters and sees that it's raining.

In (3), the new information that it's raining interacts with Joan's existing assumption that she won't go for a run if it's raining. In this case, the two assumptions together logically imply a third assumption, i.e. that Joan won't go for a run. This third assumption is a **contextual implication** of the new information, in a context described by (3). Note that neither Joan's existing assumption nor the new information could have given rise to this third assumption on their own; the contextual assumption only arises once old information and new information are combined. In all of these cases, the information that it's raining is relevant, because it achieves at least one cognitive effect. So much for the definition of relevance in absolute terms.

It seems clear that relevance is not just an absolute concept but that different stimuli will achieve different degrees of relevance. For instance, imagine two stimuli A and B. They both carry the same information but A is a lot easier and quicker to process than B. In such a case A would surely be more relevant than B. Similarly, if two stimuli C and D were to demand an equal amount of processing but C gave rise to more cognitive effects than D, C would be more relevant. In other words, the more processing effort a stimulus requires, the less relevant it is; the more cognitive effects it achieves, the more relevant it is. This is the relative definition of relevance. The question now is what role relevance plays in communication. Before I go into this, let me say what relevance theorists mean by 'communication'.

4.2.2 Ostensive communication

The kinds of stimuli discussed so far (in particular in the scenarios in (1)-(3)) all convey information in a way Grice (1957/1989) would characterise in terms of **natural meaning**. For example, the patter on the roof 'naturally means' that it's

raining. Clearly, the patter on the roof doesn't **communicate** that it's raining. It seems that the notion of communication should be much closer to Grice's (1957/1989) notion of **non-natural meaning** or **meaning$_{NN}$**, discussed in chapter 2, which involves the hearer's recognition of the speaker's intentions[2]. In fact, Sperber & Wilson (1986) define ostensive communication in a way which is very close to, but also significantly different from, Grice's notion of meaning$_{NN}$.

Taking for granted that communication crucially involves the transmission of information, Wilson & Sperber (1993: 3-4) note that a stimulus (e.g. a linguistic utterance) can convey information in a variety of ways. Only in some of these cases can the information be said to have been ostensively communicated. Consider the scenarios in (4)-(8).

(4) Peter overhears Joan talk on the phone. He notices her Irish accent and gathers from this the information that Joan is Irish.

Even though the stimulus (i.e. the utterance) produced by Joan conveys to Peter the information that she's Irish, it seems ridiculous to say that Joan in (4) has communicated to Peter that she is Irish, because she clearly had no **intention** of transmitting this information. In fact, Joan's utterance here seems to have natural rather than non-natural meaning: Joan's Irish accent 'means' that she's Irish much in the way the pattering on the roof 'means' rain. It seems clear that, at the very least, the kind of communication that is central to pragmatics has to involve the **intentional** transmission of information. However, the fact that information is transmitted intentionally is not sufficient for it to be ostensively communicated. This is illustrated in (5).

(5) Joan deliberately puts on her best Irish accent to make Peter think that she's Irish. However, she doesn't want Peter to realise that she wants him to think that she's Irish.

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[2] The terms *hearer* and *speaker* are used in place of the more cumbersome *addressee* and *communicator*. I'm using *speaker* to refer to writers and non-verbal communicators as well as bona fide speakers. The same goes, mutatis mutandis, for the terms *hearer* and *addressee*.

In (5), if Joan's display is successful, Peter will end up believing that Joan is Irish for the same reason as in (4) – because Peter takes Joan's Irish accent to 'mean' that she's Irish. Joan's intention to make him think that she's Irish plays no role in his actually coming to think that. Even though Joan has intentionally transmitted the information that she's Irish, she surely, hasn't ostensively communicated it. In this case Joan does have what Sperber & Wilson (1986: 29) call an **informative intention**, i.e. she intends to inform Peter of her Irishness. However, an informative intention alone is not enough to turn information transmission into the kind of communication involved in everyday verbal (and non-verbal) exchanges. It seems that for Joan to communicate that she is Irish she must not only intentionally convey the information but also intend Peter to realise that she wants to convey the information in question. However, as (6) shows, this is still not quite enough to guarantee that information transmission is a case of fully overt communication.

(6) Joan says something in a Irish accent. She intends to inform Peter that she is Irish and she wants Peter to realise that she has this informative intention. However, she doesn't want him to realise that she wants him to discover her informative intention.

In (6), Joan intends Peter to think that she has an informative intention, but, for some reason, she wants to hide this higher-level intention from him. So, if Joan's intentions succeed, Peter will feel that he has seen through her by realising that she is intentionally putting on her best Irish accent to make him think that she is Irish. This, too, isn't a case of ostensive communication. Because Peter doesn't think that Joan wants him to recognise her informative intention, his recognition of her intention can't play a role in its fulfilment. (6), like (5), is a case of covert 'communication'. For Joan to ostensively communicate that she is Irish, she not only must have an informative intention, but she must also intend this informative intention to be mutually manifest to her and Peter. In other words, she must have a **communicative intention** (Sperber & Wilson 1986: 29). Consider the scenario in (7).

(7) Peter asks Joan where she's from. In reply she utters
"Why, what could she have done, being what she is?
Was there another Troy for her to burn?" [3] in an obviously Irish accent.

Here, it stands to reason that Joan not only intends to make it manifest (or more manifest) to Peter that she's Irish, but that she also wants to make mutually manifest her intention. In other words, in the scenario in (7), Joan has both an informative and a communicative intention, which means that this is a case of ostensive communication. Note, however, that there is still a difference between this and the standard case of verbal communication: Although Joan has ostensively communicated that she is Irish by her utterance of "Why, what could she have done, being what she is?...", she has not, in Sperber & Wilson's (1986: 178) terms, 'said' that she is Irish, she has, instead, provided direct evidence that she is[4]. This becomes particularly clear, if one compares (7) with (8).

(8) Peter asks Joan where she's from. She says "I'm Irish".

In this scenario, Joan makes it mutually manifest that she wants to make manifest that she's Irish by saying that she is, i.e. she utters words that go a long way towards linguistically encoding (or conventionally meaning) that she is Irish. By contrast, there is nothing about the linguistically encoded content of Joan's utterance in (7) that means that she is Irish. Peter will derive that assumption purely inferentially, i.e. on the basis that someone's Irish accent (possibly along with their knowledge of an Irish poem) 'naturally' means that they are Irish.

In (8), as well as in (7), Joan has a communicative as well as an informative intention. In both scenarios, the very fact that Peter recognises Joan's communicative intention will help fulfil her informative intention. In other words,

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[3] These are the last two lines of W. B. Yeats' poem *No Second Troy*. I'm grateful to Anne Golden for suggesting this poem.

[4] Joan's utterance in (7) is very similar to an example from Searle (1965/1996: 115). In this example, an American soldier captured by the Italians in World War II utters "Kennst du das Land, wo die Zitronen blühen?" ('Do you know the land where the lemon trees bloom?') in order to convince them that he is a German officer. Searle argues that the soldier shouldn't be seen as having $meant_{NN}$ that he is a German officer by his utterance of "Kennst du das Land...", even though Grice's definition of that notion would predict that he has. As a matter of fact, I don't believe that there is anything wrong with saying that the soldier $meant_{NN}$ this – I would certainly want to say that, if successful, the soldier has

the very fact that Peter recognises that Joan wants it to be mutually manifest that she wants him to believe that she's Irish helps fulfil Joan's informative intention. In RT, acts that are manifestly intended to achieve ostensive communication, such as Joan's utterances in (7) and (8), are referred to as **ostensive stimuli**.

So far, I've used the notion of **mutual manifestness** without explicating it. Let me remedy this. According to Sperber & Wilson (1986: 39) an assumption is manifest to an individual at a certain time if and only if she's capable of entertaining the assumption at that time and accepting it as true or probably true. An assumption *A* is mutually manifest to two (or more) people iff they are capable of entertaining and accepting as true or probably true, not only *A*, but also the assumption that *A* is manifest to them. In other words, in order for a certain assumption *A* to be mutually manifest to Joan and Peter it's not necessary for either of them to **actually** be entertaining *A*, or the assumption that they are entertaining *A*, or the assumption that it is mutually manifest that they're entertaining *A*. It's enough that they both **could** entertain all of these assumptions and, if they did, accept them as true or probably true.

The above discussion should have made it clear that communication, as it is defined by Sperber & Wilson, is not just a matter of coding and decoding – in (7) Joan ostensively communicates that she is Irish without any of that information being encoded by her utterance at all. An ostensive stimulus, on this picture, is not a signal that is decoded to yield a message. Rather, the ostensive stimulus is a piece of evidence, evidence, more precisely, of the speaker's communicative and informative intentions, which the hearer uses as input to a series of non-demonstrative inferential processes. In cases like (8), part of this evidence is linguistically encoded, but even in such cases, what is ostensively communicated goes far beyond what is encoded. As will be seen below, the communicative principle of relevance explains what guides the inferential processes that lead the hearer to the recovery of the assumptions the speaker intended to communicate.

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ostensively communicated that he is a German officer, much in the same way in which Joan ostensively communicates that she is Irish by her utterance in (7).

4.2.3 The communicative principle of relevance

When a speaker has a communicative intention it seems reasonable to assume that she'll do her best to help the hearer recognise her informative intention. After all, the whole point of ostensive communication is that the speaker wants an informative intention fulfilled partly by virtue of the hearer's recognition of it. Since humans are geared towards paying attention to relevant stimuli, it will be in the speaker's interest to produce a stimulus that's at least relevant enough to be worth the hearer's attention. Therefore, once a speaker has attracted the hearer's attention and made it clear that she has a communicative intention, the hearer is licensed to expect a certain level of relevance from the ostensive stimulus the speaker has produced. This is captured by Sperber & Wilson's (1986: 158; 1995: 266-7) **communicative principle of relevance**. According to this principle, every act of ostensive communication communicates a presumption of its own optimal relevance. An ostensive stimulus is **optimally relevant** iff it is (a) relevant enough to be worth the hearer's attention and (b) the most relevant stimulus the speaker could have produced given her abilities and preferences (Sperber & Wilson 1995: 270).

Because processing effort increases as the accessibility of an interpretation decreases (and thus relevance decreases), the hearer is licensed to follow a path of least effort, accessing interpretations as they occur to him and stopping as soon as he's recovered an interpretation that meets his expectation of relevance[5].

On this picture, utterance interpretation is seen as a process of hypothesis formation and evaluation. Taking the ostensive stimulus a speaker produces as evidence of her communicative intention, the hearer will consider hypotheses concerning the content of the speaker's informative intention in their order of accessibility, stopping as soon as his expectations of relevance have been met.

Within RT, a linguistic utterance is seen as simply a special kind of ostensive stimulus. It differs from non-verbal gestures and other non-linguistic ostensively communicative behaviour in that it involves a certain amount of linguistic coding and decoding. In other words, while the addressee of an ostensive hand movement, for example, has to recover the communicator's meaning purely inferentially, the addressee of a linguistic utterance is given a certain amount of encoded information,

though not enough to render inference unnecessary as the decoding of the linguistic meaning of an utterance yields a sub-propositional conceptual representation. Taking this representation as the input to a series of pragmatic computations (constrained by the communicative principle of relevance), the hearer will come up with a hypothesis as to what (fully propositional) assumptions the speaker intended to communicate. Let me illustrate this with an example.

In the scenario in (9), in interpreting Mary's utterance the hearer (Peter) initially has access to the information in (10).

(9) Peter: Does Susan have a boyfriend?
Mary: She's a lesbian.

(10) a. Mary has uttered "She's a lesbian".
b. Mary intends the information conveyed by this utterance to be (or at least appear to be) optimally relevant to me.

Ultimately, Peter will, for example, have derived (at least) (11).

(11) Mary intends to communicate i.e. intends me to realise that she intends me to believe that
a. Susan is a lesbian.
b. Most lesbians don't have boyfriends.
c. Susan isn't likely to have a boyfriend.

Without going into the intermediate steps of this process, it's clear that metarepresentation is an integral part of utterance interpretation on this picture.[6]

As will be shown in the next section, because the process of utterance interpretation as described above involves representation and computation, it is plausible that linguistic stimuli may encode two different types of information: conceptual and procedural.

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[5] As discussed by Sperber (1994a), just what this expectation of relevance is depends on the circumstances, including the degree of the hearer's sophistication.

[6] For a more detailed account of how hearers work out what speakers intend to communicate, on the RT picture, see Wilson & Sperber (forthcoming).

4.3 Concepts and procedures (two types of information)

4.3.1 Representation and computation

Implicit in what has been said about RT so far is that it is a cognitive theory of utterance interpretation that subscribes to a particular view of the mind, i.e. the kind of computational representational theory of mind Fodor (e.g. 1985/1990) argues for. This view of the mind is based on the assumptions that (a) intentional mental states (e.g. beliefs and desires), i.e. states which represent (are about) the world, are real, and that (b) by virtue of their contents, they enter into causal relations with each other and play a causal role in behaviour.

Let me expand on this a little: Say, I look out of the window and form the belief that it is raining. I might then remember that I've left a book in the garden and, further, access my knowledge that things left outside in the rain get wet and that paper, when wet, has a tendency to disintegrate. Combining all these pieces of information (and some I haven't mentioned – e.g. my belief that books are made of paper), I may well form the belief that if I don't go and fetch my book from the garden immediately it will be destroyed. If I have a desire to preserve my book, I will, therefore, go and get it from the garden without delay. This is a typical commonsense explanation of behaviour: If I suddenly rush into the garden and someone asks me why I did this, I'm likely to give an explanation very much like the one I've just given. Clearly, if this is roughly what actually does lead to my behaviour, assumptions (a) and (b) above are right: I have mental states with representational content, e.g. the belief that it is raining or the desire to save my book and there are causal relations among these on the basis of their contents, e.g. my belief that my book will be destroyed if I don't fetch it from the garden is caused by my beliefs that it is raining, that things left in the rain get wet and that paper tends to disintegrate when wet (etc.).

A theory of the mind that holds that the commonsense explanation of practical reasoning is roughly right has to be both representational and computational: The former is required to account for the assumption that mental states have contents (i.e. that they are about things) and the latter provides the means for explaining their causal properties. Fodor (e.g. 1985/1990) argues convincingly that the only way one can make sense of a computational representational theory of

the mind, while also taking into account the productivity and systematicity of mental representations (thoughts), is by postulating a compositional system of representation, i.e. a syntactically articulated system, or 'language' of thought (sometimes known as Mentalese). On this view, mental representations are 'sentences' in the language of thought, which is conceived of as being similar to public languages like French and English in that it has both structural (syntactic) and semantic properties. The 'words' in the language of thought, on this view, are concepts, i.e. atomic mental representations. The idea is, then, that mental representations undergo the computations they do by virtue of their syntactic rather than their semantic properties. This means that mental processes are similar to inference processes in formal logic in that they can rely on purely syntactic considerations because the formal, syntactic properties of mental representations reflect their semantic contents. For instance, the way in which my belief that if it's raining things left outside get wet and my belief that it is raining cause the belief that things left outside will get wet is parallel to the logical inference from $P \rightarrow Q$ and P to Q.

Obviously, on this kind of computational representational theory of the mind, many cognitive processes involve both mental representation and computation. This doesn't just go for thought processes of which we have a commonsense apprehension, but also for such unconscious mental processes as are involved in perception. For instance, visual perception is seen as involving the construction of a series of visual (and finally conceptual) representations linked by a variety of computations. Similarly, reasoning, is seen as involving logical computations (or inferential operations, as demonstrated above) leading to a number of logical, or conceptual, representations and it is this kind of representation that concerns me here. If one places the process of utterance interpretation in the context of the kind of view of the mind discussed above, mental representation and computation are two crucial ingredients in the process. Both the output of the language module (the logical form) and the end result of the whole interpretation process (i.e. all communicated assumptions) are structured conceptual representations. However, the conceptual output of the language module, the logical form, is, crucially, never fully

propositional[7]. The result of the interpretation process as a whole is a set of fully propositional conceptual representations (assumptions or thoughts) the hearer will take the speaker to have communicated either explicitly or implicitly (more on this in section 4.4).

The role of computation in utterance interpretation is twofold. Firstly, the language module takes as input a phonetic representation and, after performing a number of phonological, syntactic and semantic computations, it delivers the output of a sub-propositional conceptual representation (the logical form). For instance, if all a hearer does is decode the linguistic content of an utterance of (12), the result will be a very minimal schematic conceptual representation like (13).

(12) He likes her.

(13) ____ LIKE ____

As mentioned in chapter 1, *he* and *she* don't linguistically encode their referents and, therefore, mere linguistic decoding will provide neither the subject nor the object of the proposition (12) is uttered to express.

Like, for instance, the visual perception system, the language system is what Fodor (1983: 41) terms an input system and input systems are modular. According to Fodor, the following are some of the properties that characterise modular systems: they are domain specific, they perform their computations automatically, they are informationally encapsulated and they are fast. In the context of this thesis, the type of computation involved in these modular systems is of relatively little interest.

Computation plays a more interesting role as far as this chapter is concerned at a different stage of utterance interpretation; namely the stage at which computations take the output of the language module as their input and deliver the set of assumptions the speaker intended to communicate. These computations are much more variable in that, with them, the same input does not lead to the same output in all contexts and the systems that perform them do not carry the functional or architectural hallmarks of Fodor's (1983) input modules (though they may well be relatively fast and domain specific and perhaps even 'modular' in a different way , as Sperber (1994b) argues). Rather, these computations are generally assumed to fall

[7] This is captured in the semantic underdeterminacy thesis. For a discussion of this and the related

within the class of central systems, which, according to Fodor (1983: 101-119), are non-modular (not automatic and not encapsulated). At this point, the hearer integrates the logical form with other information available to him from memory and from the output of other input systems (e.g. visual or auditory perception). As mentioned above, this process is constrained by pragmatic principles, for instance, the communicative principle of relevance. Since the logical form is not fully propositional, as demonstrated by (13), but the assumptions a speaker is communicating generally are, communication would not be possible without the inferential processes involved in fleshing out the logical form and deriving contextual implications or implicatures.

4.3.2 Conceptual and procedural encoding

On a cognitive view of utterance interpretation like the one described here, it seems natural to assume that many, if not most, natural language words encode representational information - the building blocks of the logical form, so to speak. After all, the output of the language module is a conceptual representation. To give an example, *sky* and *grey* in (14) can respectively be seen as leading to mental representations (or concepts) of the sky and of the colour grey.

(14) The sky is grey.

However, as Blakemore (1987) has pointed out, in a framework such as RT, where inferential processes are seen as playing a central role in utterance interpretation, it seems at least possible that some linguistic information is concerned with the inferential phase of utterance interpretation (or computation) rather than representation. In fact, the existence of this type of linguistic information is not just possible but likely, because it's in the speaker's interest to produce utterances that require as little processing effort as possible to achieve the intended effects. Since processing effort is essentially effort expended in the computational process of constructing and testing interpretive hypotheses, any information that constrains

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question of effability with arguments for the position taken here see Carston (1998, forthcoming b).

these computational processes will be effort-saving. This is the basis for the distinction between conceptual and procedural encoding.

On this picture, most natural language expressions are seen as encoding conceptual information. That is, like *grey* and *sky*, they lead directly to mental representations or concepts. However, some expressions seem to be more appropriately accounted for as encoding procedural information. Blakemore (1987: 70-76) reasons along the following lines.

(15) a. Joan loves Bach. b. She is very discerning.

Confronted with an utterance of (15), for example, it might not be immediately obvious to a hearer how the speaker intends him to interpret it. In particular, it might not be obvious to the hearer how the speaker intended (15b) to achieve relevance in the light of (15a), i.e. how he is supposed to process the utterance and what effects he is intended to derive. For instance, (15a) could be seen as a premise leading to the conclusion in (15b), but, equally well, (15b) could be the premise and (15a) the conclusion. Therefore, it would be useful if the speaker had some linguistic means at her disposal for indicating just what kind of inferential relationship she's envisaging between (15a) and (b). According to Blakemore (1987: 85-91), *so* in (16) and *after all* in (17) perform precisely this function. That is, *so* indicates that (16b) is a conclusion derived as a contextual implication from (16a)[8], and *after all* indicates that (17b) is a premise that strengthens the existing assumption (17a).

(16) a. Joan loves Bach. b. So she is very discerning.

(17) a. Joan loves Bach. b. After all, she is very discerning.

Quite generally, for any utterance there will be an indefinite range of possible contextual assumptions to access and cognitive effects to derive. Therefore, the speaker will find it useful to employ linguistic constructions, such as *so* and *after all*, that constrain the inferential phase of utterance interpretation and thus narrow down

[8] Blakemore also sometimes puts this differently, i.e. she says that *so* indicates that what follows is a conclusion derived from an accessible assumption in the context. Obviously, the proposition expressed by (16a) will be such an accessible assumption in the context of (16b). This reformulation allows for cases in which *so* is uttered discourse-initially, i.e. where nothing is communicated before the utterance introduced by *so*.

the range of possibilities the hearer may have to consider. Speakers can do this, as in (16) and (17), by indicating what kind of cognitive effect the hearer is to expect. Blakemore (1989) has analysed *but* (at least on one of its uses) along similar lines, i.e. as encoding the instruction that the main cognitive effect of the utterance of the clause that follows it is one of contradiction and elimination. I will discuss Blakemore's account of the meaning of *but* in detail in chapter 5 and suggest some modifications to it.

On the basis of the discussion so far it would be natural to conclude that all procedural information indicates what kind of cognitive effect the speaker intends her utterance to achieve. However, as Blakemore (2000) points out, this is not the case. It seems that procedural information can also give an indication of the type of context in which the utterance should be processed, or the kind of inferential process the hearer should go through. For instance, Blakemore (2000) analyses *nevertheless* as encoding the information that the segment it introduces is relevant as an answer to a question whose relevance has already been established in the preceding discourse and that it should be processed in a context which supports a contrary answer.

(18) It's raining. Nevertheless, I need some fresh air.

(19) Jack loves dolls but Jill hates them.

Thus, in (18), *I need some fresh air* could be seen as a positive answer to the question *Are going to go for a walk?*. In this case, the first clause, *it's raining*, provides the context that suggests a negative answer. It also seems that *but*, as used in (19), indicates the type of inferential process the hearer should go through rather than what contextual effects he should look for. It's not easy to find an assumption that *Jack loves dolls* gives rise to and *Jill hates them* contradicts and eliminates. It seems much more likely that *but* (at least here) indicates that the hearer should follow an inferential path that leads him to the derivation of assumptions with contradictory predicates. Obviously, I've only been able to sketch these possibilities here – I will discuss examples involving *but* in greater detail in chapter 5.

The distinction between conceptual and procedural encoding outlined above raises a number of questions. For instance, what exactly does it mean for an expression to encode procedural meaning? It's all very well to say that linguistic constructions with procedural meaning encode information that constrains the

inferential phase of communication, but something should be said about just how it does this. A further, slightly smaller question is whether a given expression only ever encodes either conceptual or procedural information or whether one and the same expression can encode both types of information. Finally, how does the theorist decide which expressions (or which aspects of an expression's encoded meaning) are conceptual and which procedural?

Section 4.3.3 is devoted to the third question. Here, I'll briefly discuss the first two questions. The first question is probably the most difficult of the three and there is no general answer to it. However, there are a whole range of possible answers, some of which will be explored in chapters 5, 6 and 7, where I'll investigate how the meanings of *but*, *although* and *even if* can be given a procedural account. On the whole, it seems easier to say what procedural information **doesn't** look like than saying what it **does** look like. Just from the fact that procedural information is not representational the following can be concluded: Procedural information doesn't appear as part of conceptual representations, therefore it doesn't have logical properties. This means that it can't entail or contradict concepts and assumptions, it can't be true or false and it can't represent states of affairs in the world (or aspects of states of affairs in the world). At least this negative characterisation enables the theorist to devise some tests to determine whether a given expression or a given aspect of the meaning of an expression is conceptual or procedural. A range of such tests will be discussed in 4.3.3.

Moving on to the second question, it is quite conceivable that a single expression could encode both conceptual and procedural information. For example, Takeuchi (1998) offers an account of the Japanese cause-consequence conjunctive particles *kara* and *node* in which she argues that they should be analysed as encoding the same causal conceptual meaning while differing in the procedural constraints they impose on foregrounding and backgrounding of assumptions. Deirdre Wilson (unpublished) has suggested that *but* and *if*, too, could encode both conceptual and procedural meaning. In the case of *but*, there is a possibility that what is encoded is both a conjunctive concept and the procedural information referred to above. I'll look at this in more detail in chapter 5.

4.3.3 Tests for distinguishing conceptual and procedural aspects of meaning

As mentioned above, just from the fact that procedural meaning is not representational, without knowing how and whether procedural meaning is represented in the mind or the exact nature of the mechanisms involved in 'constraining' the inferential phase of communication, certain conclusions can be drawn as to the properties procedural meaning has. These properties concern roughly three areas: cognition, truth-evaluability and compositionality. In all of these areas tests can be found that help the theorist decide whether a given expression encodes conceptual or procedural meaning (or whether a given aspect of the meaning of an expression is conceptual or procedural). Some of these tests have been explored by Wilson & Sperber (1993), Rouchota (1998a, b) and Iten (1998).

The first area, that of cognition, provides the most intuitive argument, which, on its own, wouldn't be very compelling. Nevertheless, in conjunction with the other arguments discussed below it provides a good indication of the type(s) of meaning an expression is likely to encode. Here is how it does this. Given that concepts are mental representations in the framework of RT, it seems plausible that the meaning of conceptual linguistic devices is directly accessible to speakers' and hearers' consciousness. Thus, if one asks any native speaker what the words *tree*, *freedom* or *because* mean, one is likely to be given a more or less satisfying paraphrase straight away. What is more, Deirdre Wilson (unpublished) points out that English speakers are generally able to say whether two conceptual expressions, for instance the prepositions *over* and *on*, are synonymous or not without having to think about it for any length of time, and, in particular, without having to test whether they are intersubstitutable in all contexts. The case of procedural expressions, on the other hand, is different. Since procedures are non-representational constraints on the inferential phase of communication, there is no reason to assume that they are (easily or at all) accessible to consciousness. In fact, it seems that procedures might be very much like linguistic rules in that they are adhered to (or executed) without ever being consciously accessed. Thus, if one asks English speakers what words like *but*, *so* and *although* mean, one is much less likely to be given a straightforward answer. In fact, even theorists are most likely to tell one how these expressions are **used**, rather than what they **mean**.

Similarly, people aren't generally able to decide whether words like *but* and *however*, *although* and *nevertheless* are synonymous without testing their intersubstitutability. Finally, there is some evidence from second language acquisition that expressions that are likely to encode procedural information are much harder to learn than clearly conceptual linguistic devices. For instance, foreign learners of English find it notoriously hard to learn the meaning (or even the proper use) of expressions such as *well*, *even* and *just*. The same goes for the acquisition of *doch* and *ja* for non-native speakers of German. All of these differences can be explained on the assumption that some linguistic devices encode representational information which is directly accessible to consciousness and some encode procedural (or computational) information which isn't[9].

The second set of tests or arguments is connected with a property of concepts discussed above, namely their truth-evaluability. Since concepts are representational, they can represent aspects of states of affairs in the world.

(20) The cat is in a tree.

For example, (20) can be uttered to represent a state of affairs in the actual world, e.g. that Mary's cat is in a tree at 10am on 12 May 2000. The word *tree* contributes a constituent to the representation of this state of affairs. In other words, the presence of the word *tree* in (20) determines an aspect of a representation that can be true or false. This means that the contribution *tree* makes to this representation can affect truth or falsity too, i.e. it may correspond to an aspect of an actual state of affairs in the world, in which case the representation will be true, or it may not correspond to an aspect of a state of affairs in the actual world, in which case the representation will be false. In the case of (20), the concept encoded by *tree* truly represents an aspect of a state of affairs if it is a tree the cat is in at 10am on 12 May 2000. This means that the presence of a given conceptual expression in an utterance can be

[9] What I say here about the accessibility to consciousness of conceptual linguistic meaning seems to be in direct opposition to Recanati's (1993: 246) claim that linguistic meanings are not directly accessible to consciousness. I believe that this is only a superficial disagreement which stems from the fact that the examples Recanati considers at the point where he makes his claim all happen to involve procedural meaning. Given that he says that linguistic meanings of sentences are "very abstract", it is also conceivable that Recanati would view all linguistic meaning in procedural terms.

objected to by an utterance of "That's not true". For instance, a hearer objecting to the presence of *tree* in (20) could utter (21) to make known her objection.

(21) That's not true; the cat is on the mat.

Interestingly, this property of truth-evaluability doesn't just seem to apply to cases where a conceptual expression is judged to contribute to 'the truth-conditional content of the utterance'. Consider, for example, (22).

(22) Sadly, I can't come to your party.

Here, most people would judge that, *sadly* doesn't contribute to **the** truth-conditional content of the utterance: for most people, (22) is true iff the speaker can't go to the hearer's party and the utterance's truth or falsity does not depend on whether or not the speaker is sad that she can't go to the party. Nevertheless, someone objecting to the speaker's use of *sadly* could felicitously utter (23).

(23) That's not true: you're not at all sad.

This indicates that *sadly* contributes a constituent to a representation communicated by the utterance.

Now, since procedural expressions don't encode representations of any kind, they can't be true or false. Therefore, one would expect it to be impossible to object to the inappropriate use of a procedural expression with an utterance of "That's not true". Indeed, there are expressions that fall into this category. For example, a hearer objecting to the speaker's use of *after all* in (17) couldn't utter (24).

(17) a. Joan loves Bach. b. After all, she is very discerning.

(24) That's not true: you're not using *she's very discerning* as a premise.
or: That's not true: loving Bach doesn't follow from being discerning.

Finally, we should expect to find significant differences between conceptual and procedural expressions as far as compositionality is concerned. It seems reasonably

clear what it means for two or more concepts to combine: generally atomic concepts combine to form complex larger conceptual representations. For instance, the concepts BLUE and EYES combine to form the complex concept BLUE EYES. Of course, this isn't always completely straightforward and there are a number of questions around the issue of just how it is that two or more concepts combine (see, for instance, Lahav 1989). Whatever the precise workings of compositionality of concepts, it is undisputed that concepts can combine and modify each other. When it comes to procedural expressions, the issue of compositionality is much less clear. Obviously, several procedural expressions can occur in one and the same utterance, so, one way or another, they have to 'combine'. For instance, Rouchota (1998a, b) argues that *so*, *then* and *too* in (25) and (26) all encode procedural meaning and in the utterances below *so* and *then* and *so* and *too* must interact in some way.

(25) A: There's a bird in the garden.
B: So, the cat didn't eat them all then.

Rouchota (1998a: 117)

(26) Jane has a year off. So she's going to finish her book too.

Rouchota (1998b: 37)

However, it seems unlikely that these procedures combine to form 'larger' or more complex procedures. It seems much more likely that they apply either all at the same time or one after another, but not so likely that they can modify each other or be modified by concepts in the same utterance. For instance, where it is easily possible to combine words that encode conceptual information with each other to an almost infinite degree of complexity, combining procedural expressions doesn't seem to work. For instance, it's impossible to apply descriptive negation or adverbials to discourse connectives like *so*, *but*, *however*, *after all*, etc. For example, while the adverbial *very much* can clearly modify *as a result* in (27), an attempt at using the same adverbial to modify *so* (which might be seen as roughly synonymous with *as a result* in these examples) leads to the unacceptable (28).

(27) He kept teasing me. Very much as a result, I hit him.

(28) He kept teasing me. *Very much so, I hit him.

I will not discuss the issue of compositionality further at this point. However, my discussion of *but* and *although* in chapters 5 and 6, as well as observations on *even*, *too* and *also* in section 4.6.7, will provide more detailed arguments.

Having just outlined some tests that should make it possible to distinguish what is encoded conceptually from what is procedurally encoded I would like to issue the following caveat: It is far from clear that all procedural, or rather 'non-conceptual', meaning is cut to the same pattern. For instance, *after all* and *nevertheless* are both likely to encode procedural meaning, but, while *after all* is likely to indicate the type of cognitive effect the hearer should derive, *nevertheless*, if Blakemore's (2000) analysis is correct, constrains the context in which the hearer is to process the utterance. Therefore, the best course of action seems to be to deal with the meaning of apparently non-conceptual expressions on a one-by-one basis, trying to give an account of individual expressions rather than starting with assumptions about the properties all non-conceptual expressions share and trying to build an account of individual expressions on the foundation of general assumptions about procedural meaning. Of course, it will be desirable, in the long term, to compare different procedural semantic accounts and draw any generalisations there might be to draw, either concerning all procedural meaning or at least concerning different sub-classes of procedural meaning.

4.4 Explicature and implicature (what is communicated)

4.4.1 Some ways in which the explicit/implicit distinction could be (and has been) drawn

The second central distinction in Relevance Theory is one between ways in which assumptions can be communicated. I've mentioned above that what is communicated is sets of assumptions (entertained mentally as conceptual representations). It is widely accepted that assumptions can be communicated explicitly or implicitly and the distinction between explicit and implicit

communication has been drawn in many different ways. I will not here discuss the literature on the explicit/implicit distinction in any detail (for an exhaustive discussion see Carston (1998)). However, I will look at the ordinary language use of the terms 'explicit' and 'implicit', explain how the distinction is drawn in RT and give some justification for drawing it in this way.

Let me start with an unproblematic example. If Mary utters (29) thereby also intending to convey (30), I think the general consensus would be that Mary has communicated explicitly the information in (31) while she has implicitly communicated (30).

(29) It's cold in this room.

(30) Someone should close the window.

(31) It's cold in room$_x$.

Now, for most people, 'explicit' seems to be synonymous with 'linguistically encoded'. The question is whether this ordinary language understanding of the term 'explicit' can be employed when it comes to characterising 'what is communicated explicitly'. In other words, is the hypothesis that an assumption is communicated explicitly iff it is linguistically encoded tenable? Examples like (32) show that it isn't and that, therefore, one should differentiate between the ordinary language use of 'explicit' and what is 'explicitly communicated'.

(32) scenario: Joan and Mary are discussing where they should take Susan on holiday. Joan suggests they take her to Munich.

Mary: She's been there.

What, if anything, has Mary communicated explicitly here? I believe that most people would say that Mary explicitly communicated the information in (33) and implicitly communicated (34).

(33) Susan's been to Munich.[10]

(34) Joan and Mary shouldn't take Susan to Munich.

This presents a problem for the hypothesis that explicitly communicated information has to be linguistically encoded. As discussed in chapter 1, indexicals like *she* and *there* do not linguistically encode their referents. Therefore, what's explicitly communicated by Mary's utterance in (32), namely (33), contains at least two constituents, *Susan* and *Munich*, that are not linguistically encoded by the utterance but rather are derived pragmatically. In such a case, and there are many more like it, if only what's linguistically encoded can be communicated explicitly, what's explicitly communicated cannot be fully propositional. In fact, the semantic underdeterminacy thesis predicts that what is linguistically encoded hardly ever (and possibly never) determines a complete proposition. This means that, on the 'explicit = encoded' view, what is explicitly communicated is hardly ever (or even never) fully propositional, yet surely what speakers communicate has to be fully propositional. This means that the first hypothesis, that only what is linguistically encoded can be communicated explicitly, does not constitute a coherent position: what is communicated has to be fully propositional, while, due to semantic underdeterminacy, what is linguistically encoded hardly ever is.

What is more, even if semantic underdeterminacy didn't exist and every sentence encoded a complete proposition, the hypothesis that only what is linguistically encoded can be explicitly communicated would not be tenable because of the undeniable existence of semantic ambiguity. In cases of semantic ambiguity, where a linguistic expression encodes more than one sense, what is linguistically encoded doesn't yield just one proposition but several. Surely, it's counterintuitive to claim that in such cases the speaker is explicitly communicating several assumptions, but the only alternative in the above framework is to say that the speaker isn't explicitly communicating anything, and that is no less counterintuitive than the first option. This means that equating explicit communication with linguistic encoding doesn't yield a satisfactory explicit/implicit distinction.

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[10] This is slightly oversimplified. In fact, Mary is most likely to have communicated something like 'Susan has been to Munich recently enough for her not to want to go again in the near future'. It's unlikely that Mary will be taken to have communicated that Susan's been to Munich at some point in her life (maybe when she was a baby).

On the basis of the examples discussed so far one might consider a modification to the above definition of explicit meaning along the following lines. True, disambiguation and reference assignment are pragmatic processes without which nothing fully propositional can be explicitly communicated. However, in both cases, although the elements in question don't **encode** their contribution to what's explicitly communicated, there is linguistic material (either an indexical or an ambiguous expression) in the utterance that **licenses** the derivation of a constituent of the explicitly communicated proposition. Therefore, a second hypothesis would be that an assumption is explicitly communicated iff it is linguistically licensed. There are, however, many examples for which this second hypothesis won't work. First, consider Mary's utterance in (35), say uttered to communicate the assumptions in (36) and (37). It seems uncontentious that, in the given scenario, the assumption in (37) is communicated implicitly, while that in (36) is explicitly communicated.

(35) Peter: Let's go for a walk.
Mary: It's raining.

(36) It's raining at time of utterance in the place where Peter wants to go for a walk.

(37) Mary doesn't want to go for a walk (at the time of utterance).

Though this may not be immediately obvious, even after reference assignment and disambiguation the linguistic expressions in Mary's utterance in (35) don't determine a complete proposition: in order for the implicitly communicated assumption in (37) to be derivable, a place constituent has to be supplied. After all, if Mary and Peter were in North London and Mary was explicitly communicating that it was raining in Timbuktu (an assumption perfectly compatible with the linguistic material Mary has uttered), Peter wouldn't be justified in assuming that Mary was implicitly communicating that she didn't want to go for a walk in North London: There is no sound inference leading from the premise that it is raining in Timbuktu to the conclusion that someone doesn't want to go for a walk in North London, while there is such an inference from the premise that it is raining in North London to this conclusion. The problem this poses is that there is no overt indexical in Mary's utterance that linguistically licenses the derivation of the place constituent needed. Therefore, the only way in which one could preserve the hypothesis that only

linguistically licensed assumptions are communicated explicitly would be by postulating non-overt or 'hidden' indexicals (see e.g. Stanley (2000)). Carston (forthcoming a) and Wilson & Sperber (forthcoming) argue convincingly against such a course of action, which means that hypothesis two, too, has to be abandoned.

Another, reasonably intuitive, option is to say that an assumption is communicated explicitly if it corresponds to the truth-conditional content of the utterance. This hypothesis seems to make the right predictions for the examples discussed so far. (31) is the truth-conditional content of the utterance in (29), (33) that of Mary's utterance in (32), and (36) that of Mary's utterance in (35). This hypothesis can also account for examples involving semantic ambiguity. However, it runs into difficulties when it comes to utterances of non-declarative sentence types. Let's assume that, in the scenario described in (32), Joan next utters (38).

(38) Has she been to Madrid?

Obviously, (38) has no truth conditions and therefore, on the second hypothesis, Joan can't be explicitly communicating anything with her utterance here. This goes against intuitions. Surely by her utterance of (38) Joan has explicitly communicated the information in (39), or something along similar lines.

(39) Joan is asking whether Susan has been to Madrid.

The discussion so far has shown that neither the hypothesis that explicit communication amounts to linguistic encoding, the hypothesis that what's explicitly communicated has to be linguistically licensed, nor the hypothesis that what's explicitly communicated is the truth-conditional content of the utterance makes the right predictions. I'll now introduce Sperber & Wilson's (1986) explicit/implicit distinction and claim that it comports with intuitions better than the three possibilities discussed so far.

4.4.2 The relevance-theoretic distinction

Sperber & Wilson (1986: 182) claim that all communicated assumptions fall into one of two categories: They're either implicatures (a notion familiar from Grice) or

explicatures (a notion defined by Sperber & Wilson to parallel Grice's notion of implicature). According to them, an assumption communicated by an utterance is an explicature iff it is a development of a logical form encoded by that utterance. As mentioned above, the logical form of an utterance is a (sub-propositional) conceptual representation or assumption schema. The notion of development of the logical form is somewhat problematic. At this stage, I'll just say that it is meant to cover (a) the processes that take the hearer from the logically incomplete logical form to a complete proposition expressed and (b) the processes involved in embedding the proposition expressed under speech act or propositional attitude descriptions. On this view, explicatures are derived by a mixture of linguistic decoding and pragmatic inference. Implicatures are given a mainly negative definition: They are any communicated assumptions that are not explicatures, i.e. their conceptual content is supplied purely inferentially. Let me demonstrate that this distinction makes the right predictions for the examples discussed so far in this section.

Clearly, the assumption in (31) is derived by decoding and just a little bit of pragmatic inference, namely reference assignment to the expression *this room*, so it is an explicature of the utterance in (29). (30), on the other hand, is not a development of a logical form encoded by (29), it is derived purely pragmatically and is, therefore, an implicature of (29). (33) is a development of a logical form encoded by Mary's utterance in (32) as it, too, is derived by decoding and reference assignment[11]. (36) is a development of the logical form encoded by (35), derived by decoding, reference assignment and enrichment. Finally, (39) is a development of a logical form encoded by (38). Here, the processes that lead to the recovery of the explicature are not just decoding and reference assignment but also an embedding of the proposition expressed under the speech act description *Joan is asking whether*[12].

On this picture, the **proposition expressed**, which is the most deeply embedded explicature, has traditionally been seen as determining the truth-conditional content of the utterance. However, the proposition expressed is not always communicated and therefore not always an explicature of the utterance in

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[11] If, as suggested in footnote 10, what Mary communicates explicitly is something like 'Susan has been to Munich recently enough for her not to want to go again in the near future', the developments of the logical form involved would include enrichment along with reference assignment.

[12] Note that this speech act description itself is derived partly by decoding (of the syntactic inversion) and partly by pragmatic inference. More will be said about the relevance-theoretic treatment of non-declarative sentence types below.

question. For instance, the utterance in (38) expresses the proposition in (40), as would the corresponding declarative, but this isn't one of its explicatures because it isn't communicated.

(40) Susan has been to Madrid.

Explicatures that are embeddings of the proposition expressed are referred to as **higher-level explicatures**. The way the explicit/implicit distinction is drawn in RT allows for more than linguistically encoded content and more than truth-conditional content to count as what is communicated explicitly. At the same time, not all linguistically encoded content necessarily contributes to what is communicated explicitly on a given occasion. Procedural linguistic meaning, which, by definition, doesn't appear in the logical form(s) encoded by the utterance, can affect either the explicit or the implicit side of communication. Conceptual linguistic meaning, on the other hand, necessarily is part of what is explicitly communicated, since it appears in the logical form(s) encoded by the utterance and will, as a consequence, also be part of any 'development' of a logical form. This means that the two central distinctions made in RT yield a three-way classification of linguistic expressions in use. In principle (and in fact), there could be conceptual expressions that contribute to explicit communication, procedural expressions that contribute to explicit communication (as will be seen in section 6 of this chapter), and procedural expressions that contribute to implicit communication.

We now have the machinery to classify all natural language expressions, including, of course, the 'non-truth-conditional expressions' discussed in chapter 2. In section 4.6, I'll indicate how some of these expressions could be (and, in some cases, have been) analysed within the relevance-theoretic framework outlined so far. Before that, let me look at what role the notion of truth conditions plays in the framework of RT.

4.5 The role of truth conditions in Relevance Theory

4.5.1 'Subjectivity' and 'aboutness'

So far in my discussion of Relevance Theory, I have been referring to the notion of truth conditions, for instance in talking of 'the truth-conditional content of the utterance', without saying exactly what role truth conditions play in the framework of RT. In the following two sections, I would like to remedy this. I will first explain how the relevance-theoretic approach can avoid some of the problems encountered by essentially truth-conditional theories of linguistic semantics, which I discussed in chapter 1 and which have also been highlighted by argumentation theorists (as mentioned in chapter 3), while at the same time capturing the intuition that utterances are 'about' things. I will then discuss the somewhat problematic notion of 'the truth conditions of the utterance' and how this hangs together with the notion of 'the proposition expressed by the utterance'.

From the discussion of the relevance-theoretic view of linguistic meaning in section 4.3 it should be clear that RT does not offer a truth-conditional account of linguistic semantics. Where truth-conditional theories of linguistic semantics assume a (more or less) direct language-world relation, RT assumes no such direct relation. As shown above, on the RT picture, linguistic entities map directly onto mental entities (either representations or computations), which act as input to or constraints on inferential processes. It is the outputs of these inferential processes, i.e. the set of communicated assumptions, that can and should be described in terms of their relation to the world and the best way of doing this may well be through the use of truth conditions[13]. This means that the relation between language and the world on the RT view is neither mediated by Fregean senses nor is it direct. It is, rather, mediated by mental representations that are not themselves completely encoded by the linguistic material in the utterance. However, crucially, there still is such a relationship, which means that RT succeeds where AT failed, i.e. it can capture the widespread (and undoubtedly correct) intuition that when we use language we say things **about** the world. At the same time, by making the language-world relation as indirect as it does, RT is in a position to account for the all-pervasive 'subjectivity'

[13] Carston (1999a) makes this point in her discussion of the way the semantics-pragmatics distinction is drawn within RT.

discerned by argumentation theorists, which I'd prefer to describe as context-dependence. Let me demonstrate this by using one of Ducrot's (1993:89) examples.

(41) The film was interesting.

Recall that, according to Ducrot, there is no objective state of affairs an utterance of (41) is about, because there is no objective property 'interesting' that could be said to have been predicated of the film in question. Recall also, that examples like this lead Ducrot to conclude that the general intuition that utterances say things about the world is an illusion. In the last chapter I argued that that's a non-sequitur (and a very undesirable one at that). Here, I'd like to suggest how RT can accommodate the 'subjectivity' of utterances, like (41), without having to claim that they aren't actually 'about' anything.

As should be clear from the discussion so far, on any relevance-theoretic account, (41) would be seen as encoding an incomplete conceptual representation. That is, as it stands, the representation encoded by (41) is merely a template for a fully propositional (mental) representation. In other words, what is encoded by the words in (41) is a radical underspecification of the proposition expressed (which, on the RT view, is entertained as a conceptual representation) – for example, the referent of the film and the temporal reference of the past tense have to be supplied pragmatically. However, when it comes to the question what exactly the word *interesting* encodes, there are two possibilities.

The first possibility is to say that *interesting* encodes a concept which will have to be narrowed down and/or expanded, according to the context. This would mean that the concept that appears in the mental representation (thought) of a speaker uttering (41) (and in that of a hearer who has understood the utterance[14]) is not the same as the concept encoded by the word *interesting*; they are rather what Carston (1996a, 1998) calls 'ad hoc' concepts, pragmatically constructed by the hearer in the process of interpretation.

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[14] NB. There is no claim that the concept entertained by the hearer has to be identical to that entertained by the speaker for communication to be successful. In fact, Sperber & Wilson (1998: 197/8) note that a duplication of meanings is not necessary for successful communication. Often, all that is required is a sufficient degree of similarity.

The second possibility is that *interesting* does not encode a full concept at all, but rather what Sperber & Wilson (1998: 184/5) have termed a 'pro-concept'. This would mean that the semantic contribution of *interesting* in any utterance must be contextually specified. The difference between the two possible accounts is that, on the first one, *interesting* does have a literal (conceptual) meaning, which will get enriched or loosened depending on the context. On the second account, on the other hand, *interesting* does not have a literal, determinate meaning: rather, as in the case of pronouns, its meaning on any given occasion has to be contextually determined. For the purposes of this chapter, it seems unimportant which one of these possibilities is chosen, though in the case of *interesting* the latter seems to capture the facts better than the former, because things are generally interesting **to** somebody.

On either account, once the hearer has narrowed down or filled in the concept encoded by *interesting* (to yield the concept INTERESTING*, where the asterisk indicates that it is an ad hoc or filled in pro-concept), figured out which film the speaker is talking about and assigned temporal reference, she will have derived a fully propositional assumption, which the speaker intended to communicate. In other words, she will have recovered the proposition expressed by the speaker's utterance in (41). This proposition could, for example, be something like (42).

(42) THE FILM MARY WENT TO SEE ON 22 MAY 2000 WAS INTERESTING*.

Clearly, this communicated assumption is about something, in fact it is predicating the property of being 'interesting' in a certain specific way (i.e. 'interesting*') of the film. If one is that way inclined, the relationship between this assumption and the world can be captured in terms of truth conditions. What this shows is that an expression like *interesting* may not in itself 'pick out' a particular (objective) property, but once it's been used in a context it certainly can. In fact, in this the behaviour of *interesting* in (41) is not all that different from the behaviour of *the film* in the same example. After all, the expression *the film* does not, in itself, 'pick out' a particular film.

The above discussion should have shown that Relevance Theory provides a framework for handling subjective aspects of meaning without having to make the unacceptable claim that language cannot be used to convey information about the world.

4.5.2 'The proposition expressed' and 'the truth-conditional content of the utterance'

Despite the fact that RT does not subscribe to truth-conditional linguistic semantics and none of the theory's basic ingredients depend on the notion of truth conditions, relevance theorists quite standardly talk of 'the truth conditions of the utterance'. For instance, in section 4.4.2 I said that the truth conditions of an utterance are determined by the proposition it expresses. So, the question is: what are 'the truth conditions of the utterance' and what is 'the proposition expressed by the utterance'?

Let me start with an obvious point. Utterances aren't propositions; utterances, at a first pass, are bits of linguistic material, produced by a certain individual at a certain time in a certain place.[15] This means that it doesn't strictly make sense to talk of 'the truth conditions of an utterance', since, as discussed in chapter 1, only propositional entities can reasonably be given truth conditions. Therefore, 'the truth conditions of the utterance' should be seen as a convenient shorthand for something like 'the truth conditions of the proposition expressed by the utterance'. This, however, raises the question as to which one of all the propositions an utterance can express or communicate determines its truth conditions.

There seems to be a general assumption that for every (single-sentence) utterance that is capable of being true or false, there is a unique proposition that determines what it takes for it to be true. For instance, given the scenario in (32), Mary's utterance won't have been false if it turns out that she doesn't think that the fact that Susan has already been to Munich is a reason for Joan and Mary not to take her there, even if that's what she intended to communicate. Should it, however, turn out that Susan hasn't been to Munich, Mary's utterance would certainly have been false.

(32) scenario: Joan and Mary are discussing where they should take Susan on holiday. Joan suggests they take her to Munich.

Mary: She's been there.

So, it seems that Grice's (1989: 359) intuition that there is a certain central core of meaning that is more 'important' than the rest is one that is shared by many. This leads us back to the question what it is that determines 'the truth conditions of the utterance' or, more precisely, what proposition communicated by or linked to the utterance it is that determines its truth-conditional content.

The answer seems to be that we should trust our intuitions in this question: We should ask ourselves 'What are the necessary and sufficient conditions for the truth of this utterance?' Intuitions about the truth conditions of a given utterance can be sharpened by applying the standard test for truth-conditionality, which consists of embedding the utterance in question in the scope of a logical or causal connective (see e.g. Carston 1988: 172-173, Ifantidou 1994: 136-148 and Carston 1998: 123-125). For the time being, I'll assume that specifying the truth conditions of an utterance is unproblematic in all cases. I will, in the final chapter, return to the question of truth conditions and it will be seen there that intuitions on what it takes for an utterance to be true are often far from clear and that the usefulness of the embedding test in making intuitions clearer is limited. Leaving this aside for the moment, it seems that one way of characterising the proposition expressed by an utterance is to say that it is the proposition that has to be true for the utterance to be true.

The problem with this characterisation is that only declarative utterances have truth conditions. Nevertheless, as mentioned in chapter 1, the similarities between non-declaratives, e.g. imperatives and interrogatives, and their corresponding declarative utterance are captured by saying that they all 'express the same propositions'. In this, RT goes along with the standard speech act account. Thus, (43)-(45) would all be seen as expressing, for example, the proposition in (46).

(43) You read books.

(44) Read books.

(45) Do you read books.

(46) PETER$_x$ READS BOOKS.

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[15] This is a very crude characterisation, but it will (have to) do for present purposes. No doubt, a

Obviously, only an utterance of (43) can be true or false and therefore it is only for (43) that one can ask 'what does it take for this utterance to be true' and conclude that the proposition that has to be true for the utterance to be true is the proposition expressed. So, it seems that 'the proposition expressed by the utterance' can be equated with 'the truth-conditional content of the utterance' only in the case of declarative utterances. This leaves the question as to how we know what the proposition expressed is for utterances that don't have truth conditions and the related question as to what purpose is served by the notion of 'the proposition expressed by the utterance'. I'll leave this until later and concentrate on another aspect of 'the proposition expressed by the utterance' in the next few paragraphs.

Within RT, there seems to be a second characterisation of or, maybe, a second condition on 'the proposition expressed by the utterance'. Since the proposition expressed often is an explicature of the utterance (as in the case of (43)), it has to be a development of a logical form encoded by the utterance, according to the relevance-theoretic definition. This leads to another question, namely, what is the connection between 'the proposition expressed by the utterance', 'the truth conditions of the utterance' and 'the utterance's explicatures'?

In the most straightforward case, a seriously and literally uttered declarative, like (43), the answer to this question is simple. In such a case, the proposition expressed by the utterance is that explicature whose development from the logical form does not involve any embedding in higher-level descriptions, which determines the truth conditions of the utterance. Unfortunately, as hinted at above, the picture is not as straightforward as this for all utterances. In the case of non-declarative utterances, the answer seems to be that the proposition expressed is not an explicature because it is not communicated and it does not determine the utterance's truth conditions because the utterance has no truth conditions. From this, one might be tempted to conclude that the fact that non-declaratives don't have truth conditions explains the fact that the proposition expressed is not communicated. However, non-serious utterances, for instance Mary's ironical utterance in (47), show that there is no such simple correlation between an utterance having truth conditions and its proposition expressed being one of its explicatures.

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whole thesis could be written on the question what exactly an utterance is.

(47) [Peter, who is 32, has just put together a jigsaw for 5-year olds]
Mary: You're a genius.

Here, the proposition Mary expresses by her utterance is something like (48). Clearly, this assumption is not one that Mary is communicating, i.e. it isn't one of the set of assumptions she manifestly wants to make manifest or more manifest to Peter. On the contrary, what Mary is communicating here is something like (49)[16].

(48) PETER$_X$ IS A GENIUS.

(49) It's a ridiculous to believe that Peter is a genius because he's put together a jigsaw for 5-year olds.

Nevertheless, there seems to be a broad consensus that ironical utterances, like Mary's in (47), do have truth conditions and, in fact, that they are strictly speaking false. This means that it can't be the case that only utterances that communicate their propositions expressed have truth conditions (or, indeed, that utterances with truth conditions must communicate their propositions expressed). Therefore, it seems that there is something else that determines the relationship between the proposition expressed by an utterance and the utterance's truth-conditional status.

The most promising hypothesis I can come up with is that what determines whether an utterance has truth conditions is its mood indicators. As will be seen in more detail in section 4.6.3, in RT, declarative mood indicators are analysed as encoding the information that the proposition expressed by the utterance is a description of an actual state of affairs (though not necessarily one endorsed by the speaker). Similarly, imperative mood indicators indicate that the proposition expressed is a description of a potential and desirable state of affairs, and interrogative mood indicators indicate that the proposition expressed resembles (in content) a relevant thought or utterance. Given this, it makes sense that it is only in cases where the proposition expressed is presented as a description of an actual state of affairs that the utterance has truth conditions in the actual world, which are determined by the proposition expressed. In fact, this approach seems to capture

accurately, not only what goes on in cases of literal and serious uses of declaratives and non-declaratives, but also in the case of irony looked at above.

Because the mood indicators on Mary's utterance in (47) are declarative, it encodes the information that the proposition expressed is a description of an actual state of affairs. For this reason, the utterance can be given truth conditions. However, in the scenario described, it is clear that, although she has used a linguistic form that encodes the information that the proposition expressed is a description of an actual state of affairs, Mary does not actually indicate that she thinks this is so. For this reason, the proposition expressed is not communicated, i.e. Mary does not make mutually manifest an intention to make it manifest. This still has not answered the question as to how one knows which proposition is 'the proposition expressed by the utterance' in non-declarative utterances. This can be tentatively answered along the following lines.

As mentioned above, the proposition expressed by an utterance must be a development of a logical form the utterance encodes. Assuming that one knows what logical form(s) non-declarative utterances encode, one knows at least what sorts of proposition are candidates for being the proposition expressed, i.e. only those that are developments of the logical form. Apart from the proposition expressed, only higher-level explicatures fulfil this criteria. So, all that is needed is a way of distinguishing between higher-level explicatures and the proposition expressed. This should be possible thanks to the fact that, while the derivation of the proposition expressed involves reference assignment, enrichment, etc., the derivation of higher-level explicatures involves an embedding under a speech act or propositional attitude description. So, the proposition expressed by an utterance can be characterised as a development of a logical form encoded by the utterance, where 'development', in this case, excludes the process of embedding under a speech act or propositional attitude description.

In this section, I hope to have made a little clearer how the notions of 'the proposition expressed by an utterance', 'the truth conditions of the utterance' and 'the utterance's explicatures' hang together. However, there is at least one question I posed above that I still haven't answered: What purpose does the notion of 'the proposition expressed by the utterance' serve in the framework of RT? I will not

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[16] For a detailed relevance-theoretic account of verbal irony see Sperber & Wilson (1981; 1986: 237-

attempt to answer this question here but, in the final chapter, I will suggest that the notion of 'the proposition expressed', in fact, serves no useful purpose in RT and is not needed for a cognitive account of utterance interpretation.

4.6 Varieties of 'non-truth-conditional' meaning

4.6.1 Preliminary remarks

As promised in the introduction to this chapter, in this section I will give an indication of how the different types of 'non-truth-conditional' devices listed in chapter 2 can be (and in some cases have been) treated within the relevance-theoretic framework outlined above. Obviously, I won't be able to do more than give rough sketches of analyses – giving complete analyses of each type of device (never mind each individual device) would mean writing several more theses (and for some devices, people have written whole theses). The one sub-set of non-truth-conditional devices I will discuss in depth are the 'concessive' expressions *but*, *although* and *even if*. There is good evidence, which I will present in chapters 5, 6 and 7, that they encode procedural meaning that affects the implicit side of communication. To these, the next three chapters are devoted.

4.6.2 Indexicals

(50) She kissed him yesterday.

(51) I'll have some of that.

The propositions expressed by utterances of (50) and (51), e.g. those in (52) and (53), obviously contain some concepts (e.g. SUSAN$_x$ [17]) that are there because of the speaker's use of the indexicals *she*, *he*, *yesterday*, *I* and *that*.

(52) SUSAN$_x$ KISSED PETER$_y$ ON 1 APRIL 2000

(53) MARY$_x$ WILL HAVE SOME OF THE CARROT CAKE

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243), Wilson & Sperber (1992) and Wilson & Sperber (1998).

[17] The subscript *x* is used to indicate that the concept in question is an individual concept, i.e. a concept of a particular Susan.

For instance, the individual concept SUSAN appears in the proposition expressed by (50) at least partly because the speaker has uttered the word *she*. However, it's equally obvious that the way in which *she* leads to the concept SUSAN is fundamentally different from the way in which *kiss* leads to the concept KISS. In simple (if not banal) terms, the difference is this: Independent of the context in which (51) is uttered, *kiss* will (at least initially) always lead to the concept KISS. The concept that *she* 'leads to', on the other hand, differs across contexts; not even initially does *she* always lead to the concept SUSAN.

Since indexicals always seem to lead to a concept that integrates with the rest of the conceptual material encoded by an utterance, the question whether they affect explicit or implicit communication can be answered relatively simply: They always affect the explicatures of an utterance. The answer to the question whether they encode conceptual or procedural information is slightly less straightforward to answer, though there is a fair amount of evidence to support the hypothesis that indexicals encode procedural information.

One such piece of evidence is simply that, if indexicals were to encode concepts, it's hard to see what those concepts could be. As just mentioned, indexicals 'contribute' or 'lead to' different concepts in different contexts. So, it seems quite obvious that *she*, for instance, doesn't encode SUSAN. However, there is a possibility that *she* could encode a much more general concept, like A CERTAIN FEMALE, which always has to be enriched to someone much more specific before it can appear in the explicit content of an utterance. This seems to be the approach taken by Bach (1987: 175-194). Even if this was the right way of accounting for what is encoded by the pronoun *she*, there would be a fundamental difference between *she* and other expressions with conceptual meaning, like *kiss*, for example: The proposition expressed by an utterance containing *she* never contains the encoded conceptual content of *she*, while the proposition expressed by an utterance containing *kiss* often does just contain the concept the word encodes. For instance, a speaker uttering (54) cannot be taken to intend to express the proposition in (55), (54) always has to express a more specific proposition, such as the one in (56).[18]

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[18] Indexicals also highlight a problem for Bach's IQ test, discussed in 2.5.4. According to Bach (e.g. forthcoming), 'what is said' is determined only by what is linguistically encoded by the utterance plus narrow context (e.g. speaker and time of utterance) and speaker intentions don't enter into the picture

(54) She likes chocolate.

(55) A CERTAIN FEMALE LIKES CHOCOLATE.

(56) JANE_X LIKES CHOCOLATE.

This means that, at the very least, the conceptual representation A CERTAIN FEMALE can't be all that is encoded by *she*. In addition there must be something that tells the hearer that he is to supply a particular referent. This additional something is most likely to be procedural. Therefore, at the very least, pronouns like *she* must encode conceptual **and** procedural information.

4.6.3 Mood indicators

(57) You eat an apple a day.

(58) Eat an apple a day.

(59) Do you eat an apple a day?

As mentioned in chapter 1, what (57), (58) and (59) have in common when they are uttered to the same hearer in the same context is that they all express the same proposition, for instance something like (60).

(60) JOHN_X EATS AN APPLE A DAY

Of course, (57), (58) and (59) are also crucially different from each other, e.g. in that only an utterance of (57) communicates the proposition expressed. The standard speech act account captures these differences by saying that the mood indicators encode information about the type of speech act the speaker intends to perform in making her utterance. Thus, declaratives are linked with assertive speech acts which commit the speaker to the truth of the proposition expressed, imperatives with

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at this level. Since the linguistic meaning of *she* is 'a certain female', on Bach's account, and speaker intentions are crucial for reference assignment in this case (*she* isn't a pure indexical), 'a certain female' must be what appears in 'what is said'. Therefore, if the IQ test is right, it should be possible to report Joan's utterance of *She likes chocolate* as *Joan said that a certain female likes chocolate.* Clearly, this isn't an adequate report of the utterance and the result of the IQ test doesn't tally with Bach's account of the pronoun *she* (and any other non-pure indexicals).

directive speech acts which are seen as requests for the hearer to perform the action described by the proposition expressed, and interrogatives are linked with a special sub-type of directive speech act, namely a request for information.

Wilson & Sperber (1988a) argue convincingly against such a standard speech act account and, indeed, against any account that analyses the meaning encoded by mood indicators in speech act terms. Here, I will just look at some of the arguments Wilson & Sperber (1988a) give against the standard speech act account of imperatives.

Charitably leaving aside non-literal and non-serious cases for the time being, Wilson & Sperber (1988a: 80-81) argue that there are a whole host of utterances in the imperative mood which are not requests by the speaker for the hearer to perform the action described by the proposition expressed. Imperatives cannot just be used to perform requests for action but a range of other (non-directive) speech acts, such as giving advice, as in (61), giving permission, as in (62), or wishing people well, as in (63).

(61) [instruction on a carton of fruit juice]: Shake well before opening.
(62) [adult to a child who is looking longingly at a box of chocolates]: Take one.
(63) [exceptional shop assistant to customer who's leaving the shop]:
Have a nice day.

In none of these examples are the conditions for a felicitous performance of a directive speech act met, yet they are all perfectly acceptable, humdrum uses of the imperative. In (61), the author of the note isn't trying to get the consumer to do anything, she is merely indicating that it would be in the hearer's interest to shake the carton of fruit juice well before opening it. In (62), too, the adult isn't trying to get the child to take a chocolate, she is simply indicating that it's all right for the child to do so. Finally, in (63), the shop assistant isn't trying to get the customer to have a nice day – whether people do or don't have nice days is usually not up to them – she is just indicating that she regards it as desirable that the customer should have a nice day.

Wilson & Sperber (1988a) (also Sperber & Wilson (1986)) capture the semantics of mood indicators in terms of propositional attitudes. They distinguish between descriptive and interpretive propositional attitudes. Descriptive attitudes,

according to them (1988b: 149), are attitudes to states of affairs. For instance, believing is seen as a descriptive attitude, because it is an attitude to a state of affairs. For example, if Mary believes that there are five eggs in her fridge, she has an attitude to the state of affairs of there being five eggs in her fridge, namely she sees it as an actual state of affairs, that is, a state of affairs that holds in the actual world. Interpretive propositional attitudes, on the other hand, are attitudes towards representations of states of affairs, such as propositions, thoughts and utterances. Wilson & Sperber analyse declarative and imperative mood indicators as encoding information about descriptive attitudes, while they see interrogative mood indicators as encoding information about interpretive attitudes. On their analysis, declaratives encode the information that the speaker entertains the proposition expressed as a representation of an actual (or possible) state of affairs. Imperatives encode the information that the speaker entertains the proposition expressed as a representation of a desirable and potential state of affairs. Finally, interrogatives encode the information that the speaker entertains the proposition expressed as an interpretation of a relevant representation.

It is standard practice within RT to capture the propositional attitude information encoded by the main clause mood indicators of an utterance in terms of general speech acts. Thus, a standard way of representing what is communicated by utterances of (57)-(59) is by giving the higher-level explicatures in (64)-(66).

(64) Mary is saying that John eats an apple a day.
(65) Mary is telling John to eat an apple a day.
(66) Mary is asking whether John eats an apple a day.

In order to avoid the counterexamples standard speech act accounts of mood indicators run into, Wilson & Sperber define the speech acts of saying, telling and asking in terms of the propositional attitudes encoded by the mood indicators. This means that *saying* is analysed as presenting the proposition expressed as a description of an actual state of affairs, *telling to* as presenting the proposition expressed as a description of a desirable and potential state of affairs and *asking* as presenting the proposition expressed as an interpretation of a relevant representation.

Given the assumption that all main clause mood indicators encourage the construction of a higher-level explicature, like those in (64)-(66), it seems safe to say

that they affect the explicit side of communication. It also seems more plausible to assume that they encode procedural rather than conceptual information for the following reasons.

First, at least in English, mood indicators are not what could be called 'words' by any stretch of the imagination. So, it isn't easy to imagine even what it is the meaning of which one would be trying to bring to consciousness. Along similar lines, it's hard to imagine what it is one would be trying to 'combine' with other expressions to test the compositionality of mood indicators. Finally, it doesn't look as if the meaning of mood indicators is truth-evaluable – B's utterance in (67) is completely unacceptable.

(67) A: Do you eat an apple a day?
B: *That's not true. You're not asking me whether I eat an apple a day/You don't think that 'I eat an apple a day' resembles a relevant thought or utterance.

On the other hand, the assumption that mood indicators encode procedural information that guides the hearer in the inferences he goes through in the process of deriving the higher-level explicatures of the utterance is quite plausible[19]. They could do this, for example, by making more accessible certain kinds of speech act or propositional attitude descriptions. For a much more detailed account of mood indicators in an RT framework see Sperber & Wilson (1986), Wilson & Sperber (1988a) and Clark (1991), for example.

4.6.4 Illocutionary and attitudinal adverbials

(68) Frankly, Peter is a bore.
(69) Sadly, I can't stand Peter.
(70) Fortunately, Mary was able to repair the car.
(71) Regrettably, Mary was unable to repair the car.

[19] Obviously, this holds only for mood indicators on main clauses. Subordinate clauses, on the whole, don't have their own explicatures (but see 6.4.1).

This type of 'non-truth-conditional' device has been dealt with in an RT framework in great detail by Ifantidou-Trouki (1993) and Ifantidou (1994). Therefore, I won't do more here than sum up her account. According to Ifantidou (148-152), illocutionary and attitudinal adverbials, such as those in (68)-(71), encode concepts. The most convincing piece of evidence for this is the fact that they all have synonymous 'truth-conditional' counterparts that are clearly conceptual. For instance, in (72)-(75), *frankly*, *sadly*, *fortunately* and *regrettably* all contribute concepts to the proposition expressed by the utterance.

(72) John spoke frankly.
(73) Mary smiled sadly.
(74) Things turned out quite fortunately for her.
(75) She left regrettably soon after she arrived.

There are only two ways of accounting for the ability of these adverbials to appear either in the proposition expressed or a higher-level explicature of the utterance: Either one claims that they are ambiguous or one assumes that the discourse adverbials and the corresponding manner adverbials are one and the same lexical item, in which case the simplest hypothesis is that they encode conceptual information. The first possibility doesn't seem very plausible because it would result in a systematic ambiguity not just for the adverbials mentioned above but for countless others as well. Furthermore, there is extra evidence in favour of the illocutionary and attitudinal adverbials in (68)-(71) encoding concepts. The most compelling argument for this is that all these adverbials are compositional, that is, they combine with other concepts to form larger adverbials. Consider (76)-(79), for example.

(76) Frankly speaking, Peter is a bore.
(77) Very sadly and regrettably, I can't stand Peter.
(78) Fortunately for Peter, Mary was able to repair the car.
(79) Most regrettably, Mary was unable to repair the car.

Interestingly (and possibly somewhat worryingly), these tests don't show such clear results for all illocutionary and attitudinal adverbials. For instance, while *actually* in

(80) seems to have a synonymous truth-conditional counterpart, as in (81), it's not so clear that it felicitously combines with any other elements to form more complex adverbials. Some attempts at doing this are shown in (82).

(80) Actually, I don't like Peter.

(81) Mary didn't just pretend, she actually ate the bug.

(82) a. *Very actually, I don't like Peter.

b. *Sadly but actually, I don't like Peter.

c. *Surprisingly and actually, I don't like Peter.

d. Actually (and maybe surprisingly), I don't like Peter.

A possible explanation for this rather mixed behaviour of *actually* is that the expression in its use as a discourse adverbial is in the process of being 'proceduralised'. This is based on the, at this stage rather vague, idea that many expressions that now have clearly procedural meaning historically started life as conceptual expressions, became routinely associated with certain inferential processes and finally lost their conceptual nature completely. It is at least conceivable that *actually* on its discourse use has become associated with a certain inferential process (I'm leaving open what that process could be) and is gradually becoming dissociated from its conceptual counterpart without having lost its conceptual nature completely as yet.

4.6.5 Illocutionary and attitudinal particles

(83) Oh, you're such a bore.

(84) Peter is an interesting man, huh!

(85) You like Peter, eh?

(86) Alas, I can't stand Peter.

There is a fair amount of doubt as to whether these items encode any linguistic meaning at all. I will not consider this question here. However, if they do encode any linguistic meaning at all, then it seems clear that the meaning they encode will have to be procedural.

First considering the argument from cognition, it's exceedingly difficult to 'bring to consciousness' the meaning of *oh*, *huh*, *eh* and *alas* (though it might be somewhat easier in the case of *alas* – at least some crossword puzzle compilers seem to think that *alas* means *unfortunately*). Both the truth-evaluability and the compositionality arguments provide very convincing evidence in favour of these 'particles' encoding procedural rather than conceptual meaning. For instance, (assuming that *oh* conveys surprise) (87) shows clearly that its meaning is not truth-evaluable, B's utterance here is unacceptable.

(87) A: Oh, it's five o'clock.
B: *That's not true, you're not surprised that it's five o'clock at all.

(88) and (89) show that, while, as expected, *I'm surprised* combines happily with other expressions to form a larger conceptual representation, *oh* is not compositional.

(88) I'm really surprised it's five o'clock.
(89) *Really oh, it's five o'clock.

This leaves the question as to whether these particles contribute to the explicit or implicit side of communication. Looking at an example like A's utterance in (87) it seems reasonable to assume that *oh* constrains higher-level explicatures; it seems at least plausible that the contribution *oh* makes to the overall interpretation of this utterance is that it leads the hearer to the construction of a higher-level explicature expressing an attitude to the proposition expressed, as in (90).

(90) The speaker is surprised that it's five o'clock.

However, *oh* can perfectly happily occur as an utterance in its own right, like for example in (91).

(91) Mary discovers that someone has sent her a letter in a heart-shaped envelope and says: Oh!

In this case, Mary's utterance does not encode any conceptual meaning at all, which means that it doesn't have a logical form, which in turn means that it can't have any explicatures. Here, if anything, *oh* must be constraining the implicatures of Mary's utterance (because the only assumptions it communicates are implicatures). In sum, if items like *oh*, *huh*, *eh* and *alas* encode any linguistic meaning at all, it's very likely to be procedural meaning that can constrain either the explicatures or the implicatures of an utterance.

4.6.6 'Stylistic differences'

This is a 'class' of 'non-truth-conditional' devices that has been given little attention in RT so far. Since this is a thesis primarily about concessive constructions I will not be able to do more than make a few very vague suggestions as to how they might be accounted for in the framework of RT.

(92) a. A dog ate my steak.
b. A cur ate my steak.

(93) a. You'll be spared a lecture.
b. You'll be deprived of a lecture.

(94) a. Peter ate my steak.
b. That bastard Peter ate my steak.

(95) a. Je t'aime.
b. Je vous aime.
c. Ich liebe dich.
d. Ich liebe sie.
'I love you.'

(96) a. Peter repaired the car.
b. Peter managed to repair the car.

(97) a. John is here.

b. John is here already.

(98) a. Jane isn't here.

b. Jane isn't here yet.

There seem to be at least three distinct types of phenomena listed in this category: (a) *dog/cur, tu/vous, spare/deprive*, (b) *that bastard, manage* and (c) *yet, already*. The elements in group (a) all clearly contribute a concept to the proposition expressed by the utterance: *dog* and *cur* by encoding it, *tu* and *vous* most likely by instructing the hearer to supply such a concept. Moreover, it seems at least possible that each pair of expressions contributes the same concept (in the same context). The differences between the members of each pair seem to stem from conventions of use rather than anything they linguistically encode. At least in the case of the *tu/vous* (or *du/sie*) distinction, the conventions governing when each expression should be used are strongly reminiscent of such social conventions as how one should greet people of different social standing (e.g. by bowing to them, shaking their hand or giving them a peck on the cheek): The knowledge of a German speaker that she should use *du* to address children, friends and relatives and *sie* to address anybody else seems very similar to the kind of knowledge that tells us whom we can greet with a peck on the cheek and whom we'd better shake by the hand or greet with a nod. In other words, unlike Levinson (1983: 128-130), who proposes that the difference between *tu* and *vous* is a matter of conventional implicature, I doubt that the difference is one of linguistic meaning proper at all.

That bastard and *manage* are also both likely to encode concepts, but it's not at all clear that these concepts are part of **the** proposition expressed by the utterance. *That bastard* and other expressions like it has a strongly parenthetical feel about it. It is at least conceivable that utterances, such as (94b) actually express two propositions: one the same as that expressed by (94a) and the other something like (99).

(99) PETER$_X$ IS A BASTARD.

The possibility of a single utterance expressing multiple propositions, as considered, for example, by Bach (1999) and Neale (1999), will be discussed in greater detail in chapter 8.

Finally, the elements in (c) are much more likely to encode procedural information that constrains the implicit side of communication. For instance, *already* might be analysed as indicating that the utterance should be processed in a context which contains the negation of the proposition expressed by the utterance. In the case of (97b), this would mean that the utterance should be processed in a context that contains the assumption that John isn't here (or that someone believes that he isn't here).

4.6.7 Focus particles

These expressions seem to be prime candidates for encoding procedural rather than conceptual information: it's hard to bring their meaning to consciousness and they don't seem to be truth-evaluable, as demonstrated by (103)-(105).

(100) Even John came to the party.
(101) John came to the party too.
(102) John also came to the party.

(103) A: Even John came to the party.
B: ?That's not true. John was quite likely to come to the party.
(104) A: John came to the party too.
B: ?That's not true. John was the only one who came to the party.
(105) A: John also came to the party.
B: ?That's not true. Coming to the party was the only thing John did.

When it comes to compositionality, things are not quite so straightforward. It seems that at least *even* can combine in interesting ways with certain other expressions, e.g. *if* and *not* in (106) and (107).

(106) Even if you write 2000 words every day, you won't finish your thesis by the end of July.

(107) Not even Bill came to the party.

The case of *even*'s interaction with *if* will be looked at in some detail in chapter 7.

At a first pass, all of these particles seem to place constraints on context. One way or another, they all seem to indicate that the utterance containing them should be processed in a context that contains a range of related propositions. Focus plays an important part in determining what these propositions are, i.e. they are propositions that are identical to the proposition expressed by the utterance in everything but the constituent the focus falls on.[20] For instance, assuming the focus in an utterance of (100) falls on *John*, that utterance is to be processed in the context of propositions like those in (108).

(108) a. Mary came to the party.

b. Jim came to the party.

c. Joan came to the party.

d. Janet came to the party.

Tentatively, *also* and *too* seem to indicate that at least one of these related propositions is true, while *even* seems to indicate the same, as well as that these related propositions come on a scale of probabilities and that the proposition expressed is the least likely of them all. A full relevance-theoretic account of the meaning of *even* will be given in chapter 7.

Interestingly, it seems that these focus particles are free to affect either the explicit or implicit side of communication. For instance, while they don't seem to affect the propositions expressed (or the higher-level explicatures) of the utterances in (100)-(102) it seems at least possible that they do affect the propositions expressed in (109)-(111).

(109) Mary was annoyed that John even ate the cake.

(110) Mary was annoyed that John ate the cake too.

(111) Mary was annoyed that John also ate the cake.[21]

In all of these cases, the fact that the cake wasn't all that John ate seems to be a crucial component of what the speaker is saying Mary is annoyed about.

4.7 Conclusion

In this chapter I have introduced the cognitive pragmatic framework of Relevance Theory . I hope to have shown that this framework makes it possible to account for all linguistic meaning using two basic distinctions: the semantic distinction between conceptual and procedural encoding and the pragmatic distinction between explicit and implicit communication. This chapter has also shown how it is possible, at one and the same time, to capture the fundamental intuition that utterances are about things and to account for 'subjective' meaning. I therefore conclude that RT provides a viable alternative both to the fundamentally truth-conditional theories of linguistic meaning discussed in chapter 2 and the ultimately completely non-truth-conditional (but also counterintuitive) Argumentation Theory discussed in chapter 3.

In the following three chapters I will concentrate on semantic accounts of 'concessives', such as *but* and *although*, and 'concessive conditionals', typically expressed by *even if*. In each case, I will give an overview of some of the accounts proposed in the literature before offering my own relevance-theoretic analyses.

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[20] This is a very rough characterisation of what goes on here. For a more detailed discussion of focus-related phenomena in the framework of RT see Sperber & Wilson (1986: 202-217).
[21] I'm grateful to Robyn Carston (personal communication) for these examples.

CHAPTER 5
CONCESSIVES I: *BUT*

5.1 Concessivity and its expression

As promised in chapter 1, the next three chapters are devoted to the topic of 'concessives'. The most obvious question to ask is what is meant by 'concessives' or 'concessivity' in language. Quirk et al. (1972: 674) have the following to say:

> Concessive conjuncts signal the unexpected, surprising nature of what is being said in view of what was said before that.

This is demonstrated, for instance, by an utterance of (1), where the information that Peter went out could be seen as surprising in the light of the information that it was raining.

(1) It was raining but Peter went out.

As (2) shows, the same kind of relation between two clauses can also be expressed using *although*. Here, however, the speaker is free to present the 'surprising' information first, as in (2b)

(2) a. Although it was raining, Peter went out.
b. Peter went out although it was raining.[1]

Finally, (3) shows that, at least in certain circumstances, an *even if* utterance can convey something very similar to (1) and (2).

(3) a. Peter will go out, even if it's raining.
b. Even if it's raining, Peter will go out.

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[1] In these, as in most (or possibly all), examples *even though* can replace *although* without making any difference to the interpretation. I will briefly discuss the difference between *although* and *even though* in chapter 6. However, unless otherwise stated, assume that any example with *although* would work equally well with *even though*.

In fact, there is a whole host of linguistic constructions which allow a speaker to convey this kind of meaning. Some of these are given in (4).

(4) a. It was raining. *Nevertheless*, Peter went out.
b. It was raining. *Still*, Peter went out.
c. It was raining, *yet* Peter went out.
d. *Despite the fact that* it was raining, Peter went out.

Apart from the fact that they can receive similar interpretations, (1), (2a, b) and (4a-d) also share the same truth conditions, i.e. they are all true just in case it was raining and Peter went out. In other words, 'concessive' linguistic devices have 'non-truth-conditional' meaning. Obviously, the truth conditions of (3a, b) are different due to the presence of *if* (more will be said on the subject of the truth-conditional status of *even* in 7.6.2).

The above examples show that 'concession' can be expressed in a multitude of ways. In these chapters, I will not attempt to give a comprehensive overview of the myriad different linguistic devices that can be used in English to express 'concession' as defined by Quirk et al.. Rather, I will concentrate on *but* and *although*, which are widely accepted to be the two most frequent 'contrastive' conjunctions in English (see e.g. Grote et al. (1997), Oversteegen (1997), Rudolph (1996), Winter & Rimon (1994) and König (1986)), and on *even if*, which König (1986: 234) sees as the most typical form of 'concessive (or irrelevance) conditional'. My reasons for doing this are the following.

First, as the many taxonomic attempts in the literature show (e.g. Quirk et al., Halliday & Hasan 1976, Mann & Thompson 1986, 1988, Hovy & Maier 1994, Rudolph 1996, Bell 1998), defining a relation of concession is not entirely straightforward. For instance, although the definition given by Quirk et al. quoted above seems initially plausible, it is surely not necessary for concession to involve an element of surprise. Instead, many theorists have used the notion of 'incompatibility', which may or may not involve surprise. Second, it's not clear what would be gained even if one did have a satisfactory definition of the notion of concession. I am interested in utterance interpretation and, in particular, in the contribution 'non-truth-conditional' linguistic elements make to it. Therefore,

having a definition of concessivity is of interest only if there is a principled way of associating certain linguistic expressions with concessive interpretations. However, as e.g. Mann & Thompson (1986) point out and as will be seen below, there is no straightforward one-to-one correspondence between linguistic devices and interpretations. Furthermore, as demonstrated above, an enormous variety of linguistic devices can be used to convey concession, but surely one wouldn't want to say that all of these expressions are synonymous. Clearly, there is more to be said about the meaning of *but*, *although*, *even if* and any of the other expressions listed than that they can be used to express concession. Therefore, the enterprise of accounting for the semantics (i.e. linguistically encoded meaning) of individual expressions, such as *but*, *although* and *even if*, is much more tangible and potentially more fruitful than that of trying to give a taxonomy of all 'concessive' linguistic expressions. While many taxonomic approaches seem to regard classificatory categories like 'concession' as primary, I would argue that such categories may be definable in a secondary way, as generalisations from the linguistic meaning of certain expressions.

This chapter is devoted to the analysis of *but*, on which there is a vast literature. Chapter 6 is concerned with *although*, on which much less has been written. Generally, the assumption seems to be that *although* covers a sub-set of interpretations that *but* can be given and, therefore, not much else needs to be said about *although*. I will argue that this assumption misses some important differences and that *although* deserves its own analysis. Finally, chapter 7 deals with *even if* (and, of necessity, much of it is concerned with the meaning of *even*).

I start this chapter by looking at the range of interpretations *but* can be given, before giving an overview and critical discussion of the early literature, which assumes that *but* is at least two ways ambiguous or polysemous. I follow this with some general remarks about the Gricean framework and its attitude to lexical ambiguity and polysemy. This leads to a longer theoretical discussion of the arguments for and against the assumption that English *but* is ambiguous or polysemous. I conclude that the arguments for an ambiguity are not overwhelming and that it is at least worth investigating whether a unitary semantics could account

for all possible interpretations of the connective *but*.[2] For this reason I then consider a range of unitary, or potentially unitary, semantic analyses of *but*, concluding the chapter with my own suggestions for an account of the meaning of *but* within the framework of Relevance Theory, as encoding a single constraint on inferential processes.

5.2 Interpretations of *P but Q*

5.2.1 Introductory remarks

One of the most prominent points of agreement in the literature on *but* is that there are a number of ways in which *but*-conjunctions of the form in (5) can be interpreted.

(5) *P* but *Q*[3]

However, as will be seen, there is a significant degree of difference among theorists when it comes to listing and describing these different interpretations. First, though, I'd like to consider a point all interpretations seem to have in common. There is widespread agreement that the truth-conditional content of utterances of the form in (5) doesn't go beyond that of (6)[4].

(6) *P* & *Q*.

For instance, the majority of theorists are agreed that (7) is true just in case John is a Republican and John is honest.

(7) John is a Republican but he is honest. (G. Lakoff 1971: 67)

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[2] I'm leaving aside the 'exception' use of *but* on which it combines with universal quantification, as in
(i) Everyone but Bill came to the party.

[3] Throughout the literature *P* and *Q* are used to stand for both, linguistic clauses and propositions expressed. I am largely adhering to this convention in this and the next chapter. Wherever the difference between the linguistic material and the proposition expressed is crucial, I state explicitly what is meant (on the whole, *P* and *Q* are reserved for linguistic clauses, in those circumstances, and different labels are used for propositions).

[4] Rudolph (1996: 47), Bach (1999: 350-355) and Neale (1999: 58) would not agree.

As mentioned in 4.5.2, the standard way of testing whether a given aspect of meaning is truth-conditional is to embed the sentence in question in the scope of a logical operator, such as *if...then* or *either...or*, or a causal connective like *because*. The aspect of meaning is truth-conditional just in case the operator takes scope over it. For instance, embedding a sentence containing *after*, such as *Peter went to see Mary after he'd eaten*, under the scope of *because* gives (8).

(8) Because Peter went to see Mary after he'd eaten, he refused her offer of food.

Clearly, someone uttering this is saying that the reason that Peter refused Mary's offer of food is not only that he went to see her and that he had eaten, but, crucially, that he had eaten **before** going to see her. In other words, the meaning of *after* is in the scope of *because* and, therefore, makes a difference to the truth-conditions of its host utterance.

Applying this test to, say, (7) shows that the meaning of *but* doesn't make a difference to the utterance's truth conditions.

(9) Because Peter is a Republican but he is honest, there is still hope for the Republican party.

A speaker uttering (9) is clearly saying that there is still hope for the Republican party for the reason that Peter is both a Republican and honest. The assumption that there is something unexpected about his being honest in light of the fact that he is a Republican clearly doesn't fall into the scope of *because*. Therefore, the truth conditions of *P but Q* are the same as those of *P & Q*.

However, it is equally widely agreed that *P & Q* does not capture the entirety of the meaning of *P but Q*. In other words, the very least one seems to be able to say without encountering too much resistance is that *P but Q* amounts to *P & Q* plus something else. Of course, the question of what this "something else" is (and whether it has the status of an entailment, a presupposition, an implicature, etc.) meets with a far smaller degree of unanimity. However, there is one more thing that one can say fairly safely and that is that the "something else" just referred to arises because of the linguistically encoded meaning carried by the conjunction *but* and not

just because of the contents of *P* and *Q* and/or the context of the utterance. This is demonstrated quite nicely by the examples in (10) and (11).

(10) My mother recommended this book and I read it.

(11) My mother recommended this book but I read it.

Clearly, *P* and *Q* have exactly the same contents in both of these examples: *P* is *my mother recommended this book* and *Q I read it*. One can easily imagine these two examples being uttered in exactly the same context, so that any difference in their interpretations must be down to the difference between *and* and *but*. Quite obviously, this difference is not negligible: The hearer will be able to infer radically different assumptions about the speaker's relationship with her mother from them.

I now turn to the question of what exactly it is that *but* adds to the meaning of utterances containing it, starting with an interpretation that has been recognised by just about every theorist in the literature.

5.2.2 Denial of expectation

Possibly the most famous example in which *but* receives a 'denial of expectation' interpretation is that in (7), repeated here.

(7) John is a Republican but he is honest. (G. Lakoff 1971: 67)

No doubt this example has proved so popular because of its mildly humorous effect, which stems from the fact that it seems to suggest that Republicans are not normally honest. According to R. Lakoff (1971) this and other 'denial of expectation' uses of *but* involve an implication relation between the two conjuncts. The idea is that the first conjunct (e.g. *John is a Republican*) implies an assumption that is then contradicted by the second conjunct (e.g. *He is honest*). In other words, on the basis of the first conjunct one might be led to expect something that is then denied – hence the name 'denial of expectation'. In the case of G. Lakoff's example (7), it is highly unlikely that the average hearer actually would come to expect that John isn't honest on the basis of the assertion that John is a Republican. Rather, it is likely that the hearer will only derive this implication once he's processed the whole utterance and

only because of the speaker's use of *but* – hence the slightly humorous effect. *But* indicates that *he is honest* contradicts an assumption implied by *John is a Republican.*

(1) provides a rather more ordinary example of a denial of expectation use of *but.*

(1) It was raining but Peter went out.

This lacks the humour of (7) because the implication from *It was raining* to *Peter didn't go out* is a pretty everyday one and, therefore, the average hearer might well expect that Peter didn't go out once he's been informed that it was raining.

In general terms, one might say that *P but Q* on a denial of expectation interpretation gives rise to (or makes use of) an assumption that *P* implies ¬*Q*. So far so good. There is general agreement in the literature on *but* that something along the lines just described does, indeed, go on in the interpretation of *but*-conjunctions like (7) and (1). There is slightly less agreement when it comes to capturing the detail. The two most contentious points are (a) the status of the assumption '*P* implies ¬*Q*' and (b) the nature of the implication that links *P* and ¬*Q*.

The two most frequent answers to question (a) are that the assumption is a presupposition or that it is a Gricean conventional implicature of the utterance. The general, vague, answer to question (b) is that the implication linking *P* and ¬*Q* is defeasible. Indeed, given that *P but Q* is generally agreed to entail *P & Q*, the implication leading from *P* to ¬*Q* **must** be defeasible, because otherwise the conjunction of *P* and *Q* would be contradictory.

(12) *Peter kissed Mary but he didn't kiss anyone.

(12) shows that in cases where *P* (*Peter kissed Mary*) entails (i.e. non-defeasibly implies) ¬*Q* (*Peter kissed someone*) an utterance of *P but Q* is contradictory and therefore unacceptable.

Some theorists, e.g. Anscombre & Ducrot (1977), Abraham (1979), König (1985) and Blakemore (1989), also distinguish a slightly different case of denial of expectation use of *but.* Consider an utterance of (13).

(13) It's raining but I need some fresh air.

Clearly, this can't be understood as conveying that P (*it's raining*) implies $\neg Q$ (*I don't need any fresh air*). Instead, there seems to be an indirect relation between P and Q. A plausible scenario in which (13) could be uttered is one where the speaker and the hearer are debating whether to go for a walk or not. In such a scenario, P (*it's raining*) could easily be understood as implying that the speaker didn't want to go for a walk, while Q (*I need some fresh air*) would imply just the opposite. König (1985: 5-6) refers to this kind of interpretation as "adversative". In more formal terms, following Anscombre & Ducrot (1977), this can be captured as (14).

(14) a. $P \rightarrow \neg R$

b. $Q \rightarrow R$

c. Q carries more weight

Applying this to (13) P (= *It's raining*) implies $\neg R$ (= *I don't want to go for a walk*), Q (= *I need some fresh air*) implies R (= *I want to go for a walk*) and, overall, the speaker seems to implicate that, on balance, she wants to go for a walk, that is Q (*I need some fresh air*) carries more weight than P (*It's raining*).

Apart from capturing the most likely interpretation of (13), (14) has the advantage of also being able to account for (1). (1), and other examples like it, fit the schema in (14) if one assumes that $R = Q$. This means that the schema would read something like (15).

(15) a. $P \rightarrow \neg Q$

b. $Q \rightarrow Q$

c. Q carries more weight

In other words, P (*It was raining*) implies $\neg Q$ (*Peter didn't go out*), Q (*Peter went out*) trivially implies Q, Q carries more weight than P and, therefore, *P but Q* implies Q (also trivially, because Q is entailed). Thus, cases in which the first conjunct P implies the negation of the second conjunct Q are simply a special case of the general denial of expectation use of *but*, according to which the two conjuncts support

opposite conclusions (or have contradicting implications), with the second outweighing the first.

5.2.3 'Semantic Opposition' or contrast

On some uses, it seems that *but* doesn't involve the denial of an expectation or an implication. Consider (16).

(16) John is tall but Bill is short. (R. Lakoff 1971: 133)

It is not immediately obvious that an interpretation of (16) has to involve a suggestion that either the first conjunct implies the negation of the second or that the two conjuncts have contradicting implications, although such interpretations can, of course, be imagined. It seems at least possible that (16) could be uttered simply to draw attention to the difference in height between John and Bill. This is in fact how R. Lakoff (1971) interprets it. According to her, there is no implicational relationship between the two conjuncts in this example or in others like it. Instead, there is a contrast between them due to the presence of antonymous lexical items in the two clauses (i.e. *tall* vs. *short*). For this reason, R. Lakoff (1971: 133) dubs this 'semantic opposition' *but*. However, as she herself concedes the lexical items involved don't always have to be strictly antonymous (assuming there is an adequate definition of that notion to start with).

Blakemore (1987: 132) considers a whole range of examples which don't involve antonymy by any stretch of the imagination, and which don't, on the face of it, look like cases of denial of expectation either. (17)-(20) are adaptations of Blakemore's examples.

(17) Susan is tall but Anne is of average height.
(18) The onions are fried but the cabbage is steamed.
(19) Mary likes skiing but Anne plays chess.
(20) His father owns Mini but mine has a Porsche.

Because the 'opposition' in these cases is not of a semantic nature, Blakemore prefers to call them 'contrast' uses of *but*.[5] For instance, in (18) *fried* and *steamed* are clearly not antonyms. At the same time, it's not very likely that a speaker uttering this sentence would want to implicate that the onions being fried somehow implies that the cabbage isn't steamed[6]. However, it is more easily imaginable that there is an indirect incompatibility between the two clauses, i.e. that *the onions are fried* has an implication which is contradicted by an implication of *the cabbage is steamed.* For instance, (18) could be uttered by Joan to the health conscious Susan who is worried about the fat content of the meal. In such a context, *the onions are fried* might well imply that the meal is going to be high in fat, while *the cabbage is steamed* would imply that the fat content of the meal isn't going to be very high. So, there is a denial of expectation reading available for these examples.

In fact, Abraham (1979: 106-107), Foolen (1991: 84-85) and Winter & Rimon (1994: 373-374) all argue that R. Lakoff's semantic opposition and Blakemore's (1989) contrast uses of *but* can be reduced to denial uses. For instance, Foolen (1991: 85) maintains that semantic opposition or contrast readings are the artificial result of looking at examples out of context and that, if one were to look at examples like (16) in a natural context, one would find that they actually involve the denial of an expectation. (21) gives a scenario along the lines proposed by Foolen.

(21) A: John and Bill are both quite tall, aren't they?
B: Actually, John is tall but Bill is short.

When uttered by B in this scenario, it does indeed seem that (16) is interpreted as involving an indirect denial of expectation: *P* (*John is tall*) is an argument for ¬*R* (*A is right – John and Bill are both quite tall*), *Q* is an argument for *R* (*A is wrong – John and Bill aren't both quite tall*) and *P* is the stronger argument (therefore, the speaker is wrong – John and Bill aren't both quite tall). I will return to the question

[5] As a matter of fact, Blakemore (1987: 138) argues that 'contrast' uses of *but*, too, involve the denial of an assumption. From this, Foolen (1991: 84) concludes that Blakemore (1987) argues for a reduction of contrast *but* to denial of expectation *but*. However, later she (1989) seems to want to distinguish the two uses of *but*.

[6] Again, such a reading is conceivable. For instance, *the onions are fried* could be taken to imply that everything else will be fried too.

as to whether semantic opposition or contrast *but* can really be reduced to denial of expectation *but* when I attempt my own account of the meaning of *but* below.

5.2.4 Correction (*sondern/sino*)

While it is at least conceivable that 'semantic opposition' or 'contrast' *but* may be reduced to (or is a special case of) 'denial of expectation' *but*, there is another use of *but* which doesn't seem to involve denied implication in any way, shape or form. This use of *but* has been distinguished by many theorists (e.g. A & D 1977, Abraham 1979) on the following cross-linguistic grounds. As used in all the examples above, *but* translates into German as *aber* and into Spanish as *pero*. However, in certain circumstances, *but* must be translated as *sondern* in German and *sino* in Spanish. (22a) gives an example of this with the German translation in (22b).

(22) a. That isn't my sister but my mother.
b. Das ist nicht meine Schwester, sondern meine Mutter.

It seems that there is neither direct nor indirect denial involved in the interpretation of an utterance of (22a). It is not the case that the first conjunct (*that isn't my sister*) implies the negation of the second (*that's not my mother*) and neither is it the case that the first conjunct implies something that is denied by an implication of the second conjunct. In English, such a reading is possible only if there is no ellipsis.

(23) a. That isn't my sister but it is my mother.
b. Das ist nicht meine Schwester, aber (es ist) meine Mutter.

Thus, an utterance of (23a) would have to be interpreted as a denial of expectation. For instance, the first conjunct (*that isn't my sister*) implies that the woman in question isn't related to the speaker, the second conjunct (*it is my mother*) implies that she is related to the speaker, and the whole utterance clearly (analytically) implies that the woman in question is related to the speaker. Note, however, that such a reading can only be achieved in German if *but* is translated as *aber*.

If the utterance is as in (22a), and so *but* is translated into German as *sondern*, then the interpretation has to be something along the following lines. In the first

clause (*that isn't my sister*) the speaker is negating an assumption that her hearer has either voiced explicitly or that the speaker is attributing to the hearer, i.e. that the woman in question is the speaker's sister. The function of the second clause (*it is my mother*) is one of correction, i.e. the second clause provides a correct replacement for the 'offending' part of the negated assumption, which is why I've dubbed this use of *but* 'correction'. (24) gives a natural scenario for an utterance of (22).

(24) A: You look a lot like your sister.
B: That isn't my sister but my mother.

A: Du siehst deiner Schwester aber ähnlich.
B: Das ist nicht meine Schwester, sondern meine Mutter.

Because correction uses of *but* seem to occur most naturally in circumstances in which the hearer has either communicated the assumption that's being negated in the first clause or the negated assumption can at least be attributed to the hearer, this use of *but* has been associated with the phenomenon of metalinguistic negation (see e.g. A & D 1977: 26-27, Horn 1989: 407). [illegible] as it will be shown below, this association doesn't hold at least not in German) [illegible] discussion more [illegible]

5.2.5 Compensation (*dafür*)

Apart from a denial of expectation *but* (corresponding to German *aber* and Spanish *pero*) and correction *but* (corresponding to German *sondern* and Spanish *sino*), Abraham (1979: 112-115) further distinguishes a use of *but* on which it can be translated into German as *dafür* (literally 'for that'). Grote et al. (1997: 97) also discuss this kind of *but*, using the notion of substitution. Both (25a) and (26a) can be translated into German using *dafür* (cf. (25b) and (26b)).

(25) a. He is a bit short of breath but he has long legs.
b. Er ist etwas kurzatmig, dafür hat er lange Beine.
(26) a. There was no chicken, but I got some fish.
b. Es gab kein Huhn, dafür habe ich Fisch gekauft.

According to Abraham, the relation between the two clauses is the following. The first clause is usually not followed by the second, i.e. there is a denial of expectation. However, in addition, the predicate of the second clause is signalled as preferred to that of the first, and the second clause is 'dominant', i.e. the second clause "receives the stronger accent of the two events" (Abraham 1979: 113). In the case of (25), these conditions indeed seem to be fulfilled (although the denial or incompatibility between the two clauses is more likely to be indirect than direct): the first clause (*he is a bit short of breath*) could, for instance, imply *he isn't a good runner*, while the second clause (*he has long legs*) would imply *he is a good runner*. The property attributed to 'him' in the second clause (i.e. that of having long legs), is clearly preferred to that attributed in the first clause (i.e. that of being a bit short of breath). Finally, the second clause does indeed seem to be "dominant", i.e. it carries more weight – the overall conclusion seems to be that 'he' is likely to be a reasonably good runner. Abraham (1979: 113) labels these kinds of examples "compensatory" or "negatively concessive". I'm sticking with the former because one way of translating Abraham's *dafür* examples into English is by using the phrase *(but) to make up for that*. For instance, (25b) could also be rendered as (27).

(27) He is a bit short of breath, but, to make up for that, he has long legs.

I will consider Abraham's account in more detail below. For the moment, let me just observe that it is striking how much these 'compensation' examples look like examples of denial of expectation *but*. Indeed, I will argue below that there is no reason at all for assuming that there is a separate *dafür* interpretation of English *but*.

5.2.6 Discourse *but*

I'll end this section by looking at two types of occurrence of *but* that don't so much involve different interpretations as different, possibly 'non-standard', uses of *but*. Bell (1998: 527) contends that there is a use of *but* that can't be accounted for in terms of denial of expectation (and it clearly isn't a correction use either). He calls this 'discourse' or 'sequential' *but* and gives the example in (28).

(28) A: We had a very nice lunch. I had an excellent lobster.

B: But did you get to ask him about the money?

According to Bell, *but* in B's utterance signals a return to the main topic of discourse. In general, Bell (1998: 530) sees the *but* clause in its 'discourse' use as cancelling "the topic domain" of what went before. This use of *but* seems to be quite widespread in newspapers, where *but* is often used to introduce a new paragraph. (29), taken from an article dealing with illegally kept DNA samples, gives an example of this.

(29) Disclosure of the degree to which police are failing to use new forensic technology is embarrassing to the police at a time when the government is making a further £36m available to develop the national DNA database.

But the most significant aspect revealed by the inspector of constabulary report, Under the Microscope, is its confirmation that "many thousands of such samples are being held outside the rules".

The Guardian, 1 August 2000

Most of the accounts of the meaning of *but* that will be considered below do not deal with this use of *but*, which is, nevertheless, very standard. This is unfortunate, because it's not immediately clear how the notions of denial of expectation, contrast, correction, or even compensation could shed light on this particular use of *but*. I will consider a possible solution to this problem in my discussion of the relevance-theoretic approach to *but*.

5.2.7 Utterance- and discourse-initial *but*

Before moving on to consider different accounts of the semantics of *but*, I'd like to say a word about *but* as it occurs utterance-initially. There seem to be at least two ways in which this can happen. Either, *but* starts a rejoinder to a previous utterance, as in (30) and (31), or *but* appears not just utterance- but discourse-initially, as in (32).

(30) A: John's in Paris at the moment.
B: But I've just seen him in Oxford Street.

(31) A: It's time for bed now.
B: But you said I could watch the end of Brookside.

(32) [Peter puts some salmon on Mary's plate]
Mary: But I'm allergic to fish. Rouchota (1998b: 25)

I won't discuss this type of example at great length here but it seems clear that there is nothing strange or marked about these uses of *but*. Therefore, any adequate account of the meaning of *but* should at least acknowledge their existence and show that it isn't in conflict with them (ideally, of course, such an account would explain how and why *but* can be used utterance- and discourse-initially).

5.3 The Lakoffs' account of *but*

R. Lakoff (1971) distinguishes two uses of *but*: 'denial of expectation' and 'semantic opposition'. G. Lakoff's (1971: 66) account of *P but Q* on a denial of expectation reading, rendered in (33), is fairly typical of the type of analysis that uses the notion of presupposition.

(33) Assertion: *P* and *Q*
Presupposition: There is an expectation that *P* implies ¬*Q*.

R. Lakoff seems to subscribe to the same view of denial *but*. She also describes semantic opposition *but* in terms of presupposition. According to her:

> in this type of sentence the presupposition is a part of the lexical item that is contrasted, rather than residing in the speaker's knowledge of the world, and therefore his expectations. The presupposition here is just that of antonymy: that A and B share all semantic features but one.
>
> R. Lakoff (1971: 134)

As far as I understand what R. Lakoff means by this, the presupposition in (16) must be that *tall* and *short* are antonyms. However, it's not clear to me why this presupposition "is part of the lexical item that is contrasted" (*tall* or *short*?). Presumably, the idea is still that *but* triggers the presupposition – it would seem absurd to claim that the presupposition is carried by *tall* or *short*. Quite apart from this and any problems there might be in defining exactly what it takes for two words to be antonyms[7], R. Lakoff herself admits that 'semantic opposition' doesn't always have to be a matter of the semantics of a specific lexical item. For instance, she uses example (34) to make the point that in some sentences it isn't clear which *but* one is dealing with.

(34) John is rich but dumb. R. Lakoff (1971: 133)

According to her, there are two ways in which this utterance could be interpreted. A denial of expectation reading could be achieved in a scenario in which a woman is looking for a rich man who is dumb, but has found that all the rich men she encounters are clever. When she finally comes across John she could utter (34) and thereby convey that *John is rich* would lead to the expectation that he's clever.

In a slightly less laboured scenario, one could imagine (34) being uttered by a daughter in reply to her mother who's urging her to marry John because he is rich. In such a case, R. Lakoff (1971: 134) maintains, one would be dealing with a semantic opposition: being rich is a good thing, being dumb is a bad thing. Interestingly, she adds in brackets "so it might not be such a good idea to marry him." This suggests very strongly that, far from being a (very peculiar) case of semantic opposition, this is actually a case of indirect denial of expectation: *P* (*John is rich*) implies ¬*R* (*it's a good idea to marry him*), *Q* (*he is dumb*) implies *R* (*it isn't a good idea to marry him*) and the utterance overall implies *R*.

In parallel to a distinction she draws between symmetric and asymmetric uses of *and*, R. Lakoff (1971: 135) also distinguishes symmetric and asymmetric *but*. For instance, the *and*-conjunction in (35) is symmetric, i.e. the order of the clauses can be

[7] For instance, R. Lakoff (1971: 134, fn. 4) discusses the cases of *hot/cold* and *hot/warm* and points out that both of these pairs differ in just one feature, i.e. *hot* might be seen as [+temperature] and *cold* as [-temperature], while *hot* might be [+intensive] and *warm* as [-intensive]. Nevertheless, only *hot/cold* would traditionally be seen as antonyms.

switched without change to the interpretation. (36), on the other hand, is asymmetric – switching clauses here leads to the dubious (37).

(35) Fords can go fast, and Oldsmobiles are safe.
(36) Fords can go fast, and Harry just got a ticket for speeding.
(37) Harry just got a ticket for speeding, and Fords can go fast.

To parallel (35) and (36) R. Lakoff sets up the *but*-conjunctions in (38) and (39).

(38) Fords can go fast, but Oldsmobiles are safe.
(39) Fords can go fast, but Harry will never get a ticket for speeding.

According to her, (38) is an example of semantic opposition *but*: two different virtues of cars or two different reasons for buying them are contrasted. (39), on the other hand, is a case of denial of expectation: the assertion that Fords can go fast, combined with the assumptions that Harry drives a Ford, that one will go fast if one can and that one gets a speeding ticket if one goes fast, leads to the expectation that Harry will get a speeding ticket sooner or later, which is denied by the second clause. Because of the similarity between (35) and (38), on the one hand, and (36) and (39), on the other, R. Lakoff (1971: 136) describes the former as symmetric and the latter as asymmetric. She argues that this is supported by the fact that it is possible to reverse the clauses of (38) to form (40) without a change in meaning, while doing the same with (39) results in (41), which must be interpreted quite differently.

(40) Oldsmobiles are safe, but Fords can go fast.
(41) Harry will never get a ticket for speeding, but Fords can go fast.

I believe that switching clauses makes a difference in both cases. Surely, someone uttering (38) would be more likely to go out and buy an Oldsmobile, while a speaker uttering (40) seems to be more in favour of Fords. This, of course, is the kind of interpretation one would expect on an indirect denial of expectation use of *but*. In such a case, *Fords can go fast* might imply that the speaker (or someone else) should buy a Ford, *Oldsmobiles are safe* might imply that the speaker should not buy a Ford, but an Oldsmobile, and whichever clause is uttered last carries more weight (an

observation which seems to demand some explanation rather than just being stated like this). This, once more, casts doubt on the distinction between denial of expectation and semantic opposition *but*, as it is yet another example of a prima facie semantic opposition example turning out to be best analysed in terms of indirect denial of expectation.

It is not clear to me that R. Lakoff's analysis could deal with correction, discourse- or utterance-initial uses of *but*. Presumably, though, denial of expectation could account for compensatory *but*. I suspect that R. Lakoff might want to treat some of those as involving semantic opposition, e.g. between the negative characteristic of being short of breath and the positive one of having long legs in (25a).

(25) a. He is a bit short of breath but he has long legs.

Similarly, she might attempt to account for correction uses, such as (22a), in terms of semantic opposition, maybe as contrasting a negative with a positive statement, or seeing the first conjunct as [-female relative] and the second as [+female relative].

(22) a. That isn't my sister but my mother.

However, I don't find either of these semantic opposition possibilities very plausible.

There are two questions regarding this account of *but* that I haven't yet addressed, i.e. what is the nature of the 'presuppositions' carried by *but* and does the fact that there are two, supposedly, different presuppositions associated with *but*, depending on whether it's used for a denial of expectation or a semantic opposition, mean that *but* is lexically ambiguous?

The answer to the first question seems to be that the notion of presupposition the Lakoffs work with is 'pragmatic' along the lines suggested by Stalnaker (1974), i.e. they see presuppositions as assumptions that are taken to be part of a shared background between speaker and hearer (see 2.4). More precisely, the type of presupposition associated with *but* is triggered by a particular linguistic form (i.e. *but*), rather than arising as a result of general conversational principles. For this reason, it seems that saying that there are two different presuppositions associated with *but* amounts to postulating at least some distinction in encoded meaning

between denial of expectation and semantic opposition *but*. Of course, this still leaves open two possibilities: lexical ambiguity (homonymy) or polysemy. Since neither of the Lakoffs address this question, and what they say doesn't provide any hints as to which way they'd be likely to go, it's impossible to decide whether they'd opt for postulating two separate lexical items of the form *but* or a single polysemous *but*.

5.4 Abraham's three *but*s

Abraham (1979) distinguishes three types of *but*: denial of expectation, correction and compensation. His main reason for making these distinctions seems to be that there are (at least) three different ways of translating *but* into German. Denial of expectation *but* is best translated as *aber*, as in (42), which is the German counterpart of (7).

(7) John is a Republican but he is honest. (G. Lakoff 1971: 67)

(42) John ist Republikaner, aber er ist ehrlich.

As already shown in sections 5.2.4 and 5.2.5, correction *but* is translated as *sondern* and compensatory *but* as *dafür*.

Abraham (1979: 93-97) also attempts to show that the distinction between *but/aber* and *but/sondern* amounts to true ambiguity by looking for two situations in which the same sentence containing *but* is true on one reading and false on the other, and vice versa. According to him (1979: 93), (43) is true on a denial of expectation (or *aber*) interpretation, while it is false on a correction (or *sondern*) interpretation.

(43) Pluto is not a horse but an animal.

Thus, the German translation using *aber*, given in (44), is acceptable and true, while the same sentence using *sondern*, as in (45), is "incorrect", in Abraham's (1979: 93) words.

(44) Pluto ist kein Pferd, (wohl) aber ein Tier.

(45) Pluto ist kein Pferd, sondern ein Tier.

Unfortunately, I find neither of these sentences particularly acceptable and, although Abraham places *wohl* into brackets to indicate that he doesn't feel it's absolutely necessary, I find (44) without it completely unacceptable. Furthermore, given the right context (which is, admittedly, not easy to supply), I find (45) perfectly acceptable. It seems to me that Abraham's intuitions concerning the truth and falsity of these sentences depend on whether the negation in the first clause is taken to be metalinguistic or descriptive rather than on the interpretation *but* receives. In particular, (45) is "false" only on the assumption that the negation is descriptive.

At least it is clear that Abraham wants to treat the differences between *but/aber*, *but/sondern* and *but/dafür* as due to there being three lexical items, i.e. he believes that there is not just one *but* in English, but that there are (at least) three homonymous *but*s. He (1979: 115-116) captures the semantics of these three *but*s in the presupposed conditions of use in (46)-(48). Each definition is followed by a typical example.

(46) DENIAL OF EXPECTATION: *P, aber Q*

a. There is an *R*, s.t. *R* usually follows *P* and ¬*R* usually follows *Q*.

b. It is not the case that *P* usually follows *Q*, or (more precisely), where *X* is the predicate of *P*, and *Y* that of *Q*, it is not the case that *Ya* entails *Xa*.

(7) John is a Republican but he is honest. (G. Lakoff 1971: 67)

(47) CORRECTION: *Nicht P', sondern Q* (*P* = *nicht P'*)

a. An opposition between *P'* and *Q* entails ¬*P'* and *Q*

b. The assertion of ¬*P'* is represented by explicit (unincorporated) negation.

c. It is not the case that *Q* usually follows *P'* or *P'* usually follows *Q*, or that there is any kind of dependence between *P'* and *Q* (i.e. they don't entail or contradict each other)

(22) a. That isn't my sister but my mother.

(48) COMPENSATION: *P, dafür Q*

a. $\neg Q$ usually follows *P*.

b. *Q* is preferred to *P*.

c. *Q* receives the stronger accent than *P*.

(25) a. He is a bit short of breath but he has long legs.

As indicated in section 5.2.5, the most problematic aspect of this is the fact that Abraham distinguishes between denial of expectation (or, as he calls it, "concessive") *but* and compensation *but*. Indeed, my impression that Abraham's *dafür* cases can be analysed as instances of indirect denial without missing anything is confirmed by Grote et al.'s (1997: 96) discussion of a *dafür* example of their own, which is given in (49a) and translated into German in (49b).

(49) a. Mary doesn't own a car, but a bike instead.

b. Mary hat kein Auto, dafür hat sie ein Motorrad/Fahrrad.[8]

They say about this kind of reading that

> ...an, apparently negative, statement is made, and another one serves as – possibly partial – compensation.
>
> Grote et al. (1997: 96)

In the case of (49), the idea is that Mary's not having a car is negative (e.g. because it means she's not mobile), while her having a bike compensates for her lack of a car (e.g. because it means that she is mobile after all). This, as mentioned above, reinforces the impression that the 'substitution' use of *but* is no more than a (possibly slightly special) version of denial of expectation *but*.

(25) a. He is a bit short of breath but he has long legs.

---

[8] I give two options here, because German doesn't have a single word to cover both bicycles and motorcycles.

For instance, (25a) is most likely to be uttered in the scenario of a discussion about how good different people would be at running. In that case, *P* (*he is a bit short of breath*) could be seen as implying ¬*R* (*he wouldn't make a good runner*), *Q* (*he has long legs*) as implying *R* (*he would make a good runner*), and *Q* carries more weight than *P*.

In fact, I suspect that *dafür* isn't a way of translating *but* into German at all. It is worth noting that in all the examples above it would be more natural to translate the English version containing *but* into German using both *dafür* and *aber*: (50)-(52) seem to do a better job at capturing the meaning of the English (25a), (26a) and (49a) than their corresponding (b)-sentences.

(26) a. There was no chicken, but I got some fish.

(50) Er is etwas kurzatmig, dafür hat er aber lange Beine.

(51) Es gab kein Huhn, aber dafür habe ich Fisch gekauft.

(52) Mary hat kein Auto, dafür hat sie aber ein Motorrad/Fahrrad.[9]

It is equally interesting that, in order to capture exactly what the German examples say, the English examples should (and in the case of (49) do) contain an expression like *instead* or *to make up for that*. Thus, (25a) and (26a) should probably look more like (53) and (54).

(53) He is a bit short of breath, but, to make up for that, he has long legs.

(54) There was no chicken but I got some fish instead.

As already mentioned, Abraham makes it very clear that he believes that the three different interpretations of *but* he lists are not just three distinct senses of a single lexical item, but rather that there are three distinct, homonymous, lexical items in English.

The question as to the nature of the presuppositions Abraham associates with *but* or, more precisely, the three different *but*s, is slightly more tricky. On the one hand, he seems to see them as necessary and jointly sufficient conditions of **use**, but,

[9] The relative position of *aber* and *dafür* in the second clause doesn't seem to make much difference to its meaning, i.e. there seems to be no difference in interpretation between *Er ist etwas kurzatmig, dafür hat er aber lange Beine* and *Er ist etwas kurzatmig, aber dafür hat er lange Beine.*

on the other hand, he seems to think that whether the conditions are met in a given situation determines the truth or falsity of a *but* utterance. The former seems to indicate that his idea of presupposition is pragmatic and quite close to that of the Lakoffs, while the latter indicates that he operates with a semantic notion of presupposition. However, this is surely not a tenable position, as there is a fair amount of evidence in favour of the view that *but* doesn't affect the truth conditions of utterances containing it (see 5.2.1).

5.5 An AT account

5.5.1 Two *mais*

The treatment of the meaning of *but* (or rather its French equivalent, *mais*) given by Anscombre & Ducrot (1977) is probably the most influential account in the literature, certainly as far as denial of expectation *but* is concerned. They distinguish two kinds of *but*: denial of expectation and correction (though they use different labels). This basis for the distinction lies in the cross-linguistic fact that both German and Spanish have (at least) two non-synonymous expressions to translate *but* or *mais*. As already mentioned in section 5.2, denial of expectation *but* is translated into German as *aber* and into Spanish as *pero*. Correction *but*, on the other hand, is translated as *sondern* in German and *sino* in Spanish. For this reason, A & D term correction *but* "$mais_{PA}$" and denial *but* "$mais_{SN}$". I'll start by looking at A & D's treatment of correction *but*.

5.5.2 $Mais_{SN}$

According to A & D (1977: 24-25), the conditions in (55) have to obtain for correction *but* to be able to connect two sentences *P* and *Q*.

(55) Correction (*mais*$_{SN}$)

a. *P* has the form of *not P'*

b. The same speaker is uttering all of *P but Q*[10]

c. The speaker presents *Q* as her reason for rejecting *P'*

d. *Q* has to refute *P'* directly, i.e. *Q* and *P'* have to characterise the same kind of fact (in ways which the speaker deems incompatible with each other). *Q* has to be capable of replacing *P'*.

Clearly, in (22), our correction example from above, these conditions are met.

(22) a. That isn't my sister but my mother.

b. Das ist nicht meine Schwester, sondern meine Mutter.

The first conjunct does, indeed, contain an overt, unincorporated negation (*not* or *nicht*), both conjuncts are uttered by the same speaker, the second (*she is my mother*) is presented as the reason for rejecting the positive counterpart of the first (*she is my sister*) and *P'* (*she is my sister*) and *Q* (*she is my mother*) do indeed describe the same kind of fact in an incompatible way (the woman in question can't simultaneously be the speaker's sister and her mother). However, there are a number of problematic aspects of the conditions given by A & D.

First, the notion of 'the same kind of fact' is vague and could do with some explication. For instance, somebody being the speaker's sister and somebody being her mother are intuitively the same kind of facts, but it is doubtful whether the same can be said for attending peace talks and tending pea stalks, as should be the case, since an utterance of (56) is clearly acceptable (and equally clearly a correction use of *but*). In fact, this point will probably hold for virtually all corrections of linguistic form.

(56) Peter didn't attend the peace talks but tend the pea stalks.

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[10] In fact, A & D (1977: 39) ultimately translate this condition into the claim that uttering *P mais*$_{SN}$ *Q* amounts to the performance of a single speech act, while an utterance of *P mais* $_{SN}$ *Q* involves the performance of two distinct speech acts. As will be seen, Blakemore's (1989) account of *but* echoes this claim.

(57), a similar example in German, must contain *sondern* for it to be interpreted parallel to (56) – (58), the same example using *aber* can only be interpreted as a denial of expectation (a suitable context for which is not easy to find).

(57) Fritz hat nicht Hilfe gebraucht, sondern die Hälfte geraucht.
'Fritz didn't need help but smoke half.'

(58) Peter hat nicht Hilfe gebraucht, aber die Hälfte geraucht.

(56) is most likely to be uttered to correct someone who has misheard an utterance of "Peter tended the pea stalks" as "Peter attended the peace talks" and maybe asked "Which peace talks did Peter attend?". In such a scenario *Peter attended the peace talks* and *Peter tended the pea stalks* don't **describe** the same kind of **fact** but they **represent** the same **utterance**. This seems to indicate that, rather than describing the same kinds of fact, an utterance *P'* and an utterance of *Q* should perform the same communicative function.

A further problem is also connected with condition (d): The requirement that the speaker should deem *P'* and *Q* incompatible is open to interpretation. It is reasonably clear what this incompatibility is in the case of (22), because the likelihood of one and the same person being the speaker's sister and her mother is small to say the least. However, it is much less clear how the facts described by *P'* (*we saw the hippopotamuses*) and *Q* (*we saw the hippopotami*) in (59) can be incompatible, since they clearly describe exactly the same fact.

(59) We didn't see the hippopotamuses but the hippopotami.

Again, it seems that the incompatibility isn't between **facts** but between **utterances**. Of course, I'm being somewhat facetious because it is clear that in both (56) and (59) the negation in the first clause isn't descriptive but metalinguistic, i.e. the speaker is not so much concentrating on the propositional content of the utterance as objecting to it on other grounds (though (56) might prove to be a bit of a headache in that

respect, as the propositional content of *P'* is at least part of what the speaker is objecting to[11]).

Anscombre & Ducrot (1977: 26-27) state that the negation in *P* must have what they call 'polemic' character, not in its strict sense, in which it can only be used to object to an actual preceding utterance, but in a looser sense, i.e. one in which it can also be used to object to a potential utterance. Clearly, A & D's 'polemic' negation is very close indeed to Horn's (1985, 1989) metalinguistic negation. In fact, by saying that metalinguistic negation

> occur[s] naturally only as responses to utterances by other speakers earlier in the same discourse contexts, or as mid-course corrections after earlier utterance by the same speakers

Horn (1989: 375) makes it clear that his metalinguistic negation corresponds to A & D's strictly interpreted polemic negation. It seems that Carston's (1996b) definition of metalinguistic negation is much closer to A & D's polemic negation interpreted more loosely (as it has to be in order to apply to all *sondern*-type uses of *but*). She (1996b: 320) argues that

> The correct generalization about the metalinguistic cases is that the material in the scope of the negation operator, or some of it at least, is echoically used, in the sense of Sperber and Wilson (1986), Wilson and Sperber (1988[b], 1992).

Crucially, echoic use does not necessarily involve an actual thought or utterance. Instead,

> the thought being echoed may not have been expressed in an utterance; it may not be attributable to any specific person, but merely to a type of person, or people in general; it may be merely a cultural aspiration or norm.
>
> Wilson & Sperber (1992: 60)

---

[11] On Carston's (1996b: 322-325) view of metalinguistic negation, there is nothing surprising about it being used to object to the propositional content of an utterance (actual or potential). However, note that Carston (1999b: 379) distinguishes two types of 'echoic' negation: 'metalinguistic' and 'metaconceptual'. The former is used to object to an aspect of form, the latter to an aspect of content. So, she would describe the negation here as 'metaconceptual' rather than 'metalinguistic'.

In other words, Carston (1996b) gives a full account of metalinguistic negation that tallies with A & D's intuitions on the type of negation that is involved in the use of *but* on which it corresponds to *sondern* (or *sino*).

In spite of the problems discussed above, there is much about A & D's account of *sondern* and correction *but* that seems right: They can't combine with incorporated negation and the second clause is, indeed, understood as replacing the first (or a particular aspect of it) rather than denying an expectation created by it. Furthermore, it also seems absolutely right that *P but Q* on a correction interpretation must be uttered by the same speaker, or, if it isn't, as in (60), it must be understood as the second speaker continuing the first speaker's utterance rather than making her own new utterance.

(60) a. A: Peter isn't a hero...
B: But a complete and utter prat.

b. A: Peter ist kein Held...
B: Sondern ein kompletter Idiot.

In the final section of this chapter, I will try to show how a general relevance-theoretic constraint can capture A & D's intuitions concerning the correction use of *but*, while avoiding the vagueness endemic to concepts such as "the same kind of fact".

5.5.3 *Mais$_{PA}$*

The second kind of *but* (or *mais*) A & D recognise is equivalent to German *aber* and Spanish *pero* – hence *mais$_{PA}$*. As already noted, they (1977: 28) claim that the rules in (61) govern the appropriate use of this kind of *but*.

(61) Denial of expectation (*mais$_{PA}$*)

a. *P* is an argument for ¬*R*.

b. *Q* is an argument for *R*.

c. *Q* is a stronger argument for *R* than *P* is for ¬*R*.

Leaving aside any reservations regarding the notions of 'is an argument for' and 'is a stronger argument', which have been discussed at some length in chapter 3, this is a very elegant account. Without a doubt, it captures what goes on in (13):

(13) It's raining but I need some fresh air.

Uttered in the scenario described above, i.e. one in which speaker and hearer are debating whether or not to go for a walk, *P* (*it's raining*) is an argument for ¬*R* (*I don't want to go for a walk*), *Q* (*I need some fresh air*) is an argument for *R* (*I want to go for a walk*) and, intuitively *Q* is the stronger argument, because the overall drift of the speaker's utterance will surely be that she wants to go for a walk (i.e. the overall conclusion is *R*). However, the beauty of this account is that (61) not only does a good job in accounting for examples that involve indirect denial of expectation and for which G. Lakoff's presupposition couldn't account, it is also perfectly suited to account for his own examples, which involve direct denial of expectation. For instance, (7) could be analysed as follows.

(7) John is a Republican but he is honest. (G. Lakoff 1971: 67)

P(*John is a Republican*) is an argument for ¬*R* (*John isn't honest*), *Q* (*he is honest*) is an argument for *R* (*he is honest*) and *Q* is the stronger argument than *P*. As this shows, in such a case *R* = *Q*, and the condition that *Q* be a stronger argument for *R* than *P* for ¬*R* is fulfilled trivially, since it is hard to imagine that *P* could be a stronger argument for something else than *Q* is for itself.

Assuming that compensation *but* and contrast *but* can be reduced to denial of expectation *but*, A & D's account is very successful. Although it is not, on the face of it, equipped to deal either with discourse *but* or with utterance- and discourse-initial uses of *but*, it is at least conceivable that the account could be modified so as to accommodate these uses. For instance, if *P* was allowed to be not just the propositional content of a linguistic clause, but, instead, was free to be any kind of assumption accessible in the context, discourse uses of *but* and *but* in utterance- and discourse-initial positions, such as (32), would no longer be problematic.

(32) [Peter puts some salmon on Mary's plate]
Mary: But I'm allergic to fish.

This, however, would be quite a radical move away from A & D's account and into the kind of account I will ultimately want to give in an RT framework.

It is a sign of the success of A& D's (1977) account of *but* that many theorists have adapted it to fit their own frameworks, or even adopted it wholesale. For instance, Winter & Rimon (1994) give an account of *but* (and other "contrastive" connectives) in the formal semantic framework of Veltman's (1986) data logic, which is based on A & D's intuitions about denial *but.* However, they (1994: 374) believe that A & D's Argumentation Theory does not provide "an explanatory model of the facts" and is "rather informal". By contrast, König (1985: 6) more or less adopts A & D's account of *mais*$_{PA}$ as it is to define his notion of "'adversative' relations", which, according to him, are typically expressed by *but.* Recanati (forthcoming) also seems to base his conventional implicature encoded by denial *but* largely on A & D's (1977), without, however, subscribing to AT.

5.6 How many *buts*?

5.6.1 Ambiguity or no ambiguity?

Given the wide range of different interpretations utterances of the form *P but Q* can be given, the question is what accounts for this diversity? The answer given by the theorists whose accounts have been discussed so far seems to be that at least some of these interpretations arise because English *but* has two (or, for Abraham, three) distinct senses. Indeed, at least Anscombre & Ducrot and Abraham seem to believe that there isn't just one lexical item *but* in the English language, but that there are several. In other words, according to them English *but* isn't just polysemous, but lexically ambiguous[12].

[12] In what follows I will largely ignore the difference between polysemy and ambiguity. My justification for this is that, from a cognitive point of view, it seems to make very little difference whether one claims that there is one lexical item with several distinct senses or that there are several different homonymous lexical items – both these versions amount to several items, either meanings or lexical items, being stored in the mental lexicon. For a discussion of polysemy in almost entirely pragmatic terms, see Papafragou (forthcoming).

If one bears in mind that most of these analyses date from a time at which Grice's pragmatic programme hadn't taken root as firmly as it subsequently has, it is not surprising that none of these theorists seem to be unduly worried about postulating lexical ambiguities. Indeed, pre-Grice, there didn't seem to be any really convincing way in which one could have accounted for differences in interpretation using general pragmatic principles rather than postulating lexical ambiguities or polysemies.

However, Grice's pragmatic programme, using his Co-operative Principle (CP) and maxims, provides a means of explaining how one and the same lexical item can receive different interpretations in different contexts. Once there is this possibility of pragmatic accounts of differences in meaning, there must be a way of choosing between them and the more traditional homonymy or polysemy accounts. Grice's (1978) Modified Occam's Razor, which states that senses shouldn't be multiplied beyond necessity, provides a heuristic for making this decision according to which pragmatic explanations should be preferred whenever their explanatory power is equal to that of ambiguity accounts. Ultimately, of course, the answer to the question of whether English *but* is lexically ambiguous depends on whether or not a specific unitary account of *but* can be found, on the basis of which the various different interpretations of *but* can be explained pragmatically. However, before considering this, I think it is worth asking what, if any, reasons there are to assume that English *but* has more than a single encoded meaning. For, if there were any good reasons, trying to give *but* a unitary semantics would be a pointless enterprise. In the rest of this section I will examine the reasons, particularly those given by A & D (1977), for assuming that *but* is ambiguous.

5.6.2 The case for ambiguity

In general, what seems to have led to the idea that English *but* (and French *mais*) could be ambiguous is cross-linguistic data that shows that there are several languages with more than one lexical item corresponding to English *but*. Thus, Horn (1989: 406) seems to speak for many theorists when he states that, where the two functions of *but* (i.e. denial and correction, which he terms 'concession' and 'contrast') are concerned,

the cross-linguistic evidence supports the hypothesis that there is a lexical rather than merely a pragmatic ambiguity involved.

Horn (1989: 406) adds weight to his argument by observing that the same distinction is made lexically not just in German and Spanish, as discussed by A & D (1977), but also in Swedish and Finnish (and it could be added that a distinction is also made in Hebrew[13]). Surely, one could argue, if so many different languages make the same lexical distinction, then there must be a distinction in languages with only one surface form, such as English and French, too. In fact, I will argue in section 5.6.3 that, intuitively enticing though this line of argument may be, it isn't actually logically compelling at all.

Horn (1989: 407) seems to use as an argument for an ambiguity the fact that correction *but* and denial *but* show different distributional properties. In this, he echoes A & D (1977: 33) who argue that there are distributional and syntactic properties that distinguish the two types of French *mais* (and by extension English *but*). They (1977: 34-40) use six arguments to show this. In what follows I will discuss only three of them, since the other three don't seem to work in English as well as they do in French.

First, they argue that, because the first clause of *P but Q* on a correction reading has to contain an explicit negation, while it obviously doesn't on a denial reading, the two clauses can be reversed with acceptable results in the latter case but not in the former. For instance, while both (62a) and (b) are okay, only (63a) is acceptable. This becomes particularly clear (to German speakers like myself, at least) when these sentences are translated into German, as in (64) and (65).

(62) a. He isn't tall but he is strong.
b. He is strong but he isn't tall.

(63) a. He isn't tall but very tall.
b. *He is very tall but not tall.

(64) a. Er ist nicht gross, aber (er ist) stark.
b. Er ist stark, aber (er ist) nicht gross.

(65) a. Er ist nicht gross, sondern sehr gross.

b. *Er ist sehr gross, sondern nicht gross.

Second, A & D (1977: 35) observe that *but* can be interpreted as involving correction only if the negation in *P* is unincorporated – incorporated negation is not enough. Thus, (66a) and (67a) are acceptable while (66b) and (67b) aren't.

(66) a. It isn't possible but necessary.

b. *It is impossible but necessary.[14]

(67) a. Es ist nicht möglich, sondern notwending.

b. *Es is unmöglich, sondern notwendig.[15]

The third argument A & D give is that, in the case of correction *but*, if *P'* (the unnegated *P*) and *Q* have any part in common, that part is deleted. In the case of denial *but*, however, this shared part is either there explicitly or referred to anaphorically. For instance, *but* in (68) can't be given a correction interpretation (though it can of course be interpreted as a denial of expectation). In order to get a correction interpretation, the material the two clauses have in common has to be ellipsed, as in (69).

(68) She isn't my sister but she is my mother.

(69) She isn't my sister but my mother.

Note that in German, where the difference between denial of expectation and correction is clearly linguistically encoded, both readings can be achieved with or without ellipsis – (70a) and (b) and (71a) and (b) are all equally acceptable.

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[13] See Dascal & Katriel (1977) on *aval* and *ela*.

[14] Of course, as with many of the English examples given, there is an interpretation on which an utterance of this would be perfectly acceptable. For example, in a scenario in which B has to finish an assignment by the next day and A has just told B that that's impossible, B could utter (66b) using *but* to express a denial of expectation: *it's impossible* could imply that B won't try to finish the assignment, while *it's necessary* would imply that she will.

(70) a. Sie ist nicht meine Schwester, sondern sie ist meine Mutter.
b. Sie ist nicht meine Schwester, sondern meine Mutter.

(71) a. Sie ist nicht meine Schwester, aber sie ist meine Mutter.
b. Sie ist nicht meine Schwester, aber meine Mutter.

In fact, A & D (1977: 36) claim that if material is ellipsed and the first clause contains an explicit negation *but* can only be given a correction interpretation. This seems right: Consider the scenario in (72)

(72) A: You look a lot like your sister.
B: She isn't my sister but she is my mother.
B': She isn't my sister but my mother.

Here, B's utterance will be interpreted as involving a denial of expectation: *P* (*she isn't my sister*) implies that A was wrong, while *Q* (*she is my mother*) implies that A wasn't totally wrong (because the woman in question is close relative of B's). B', on the other hand, can only be taken to be correcting A's mistake without comforting A that he wasn't completely wrong.

5.6.3 The case against ambiguity

I've shown in the last section that the two main reasons for assuming an ambiguity in English *but* are that a number of other languages have separate lexical items for correction and denial uses of *but* and that the two interpretations have different distributional properties. In this section I will argue that neither of these arguments is compelling.

Granted, the fact that other languages have two (or more) non-synonymous lexical items to capture different interpretations of a single English word makes it tempting to assume that the English word is, therefore, ambiguous. And it certainly is the case that clearly ambiguous words do get several different translations corresponding to their different meanings. For instance, the English word *bat* is

[15] Unlike its English counterpart, this sentence isn't acceptable in any context.

translated into German as *Schläger* or *Fledermaus*, into French as *batte* or *chauve-souris* and into Italian as *mazza* or *pipistrello*, depending on whether it is interpreted as 'cricket bat' or 'flying rodent'. In fact, it seems highly unlikely (though, of course, possible) that there is another language that has one and the same word to describe a hitting implement and a flying rodent. In this, *but* is quite different from an undoubtedly ambiguous word like *bat*: There are at least as many languages that use the same word for correction and denial of expectation as there are languages that have a separate word for each.

Furthermore, there are many instances where a single word in one language has two non-synonymous translations in another, where the single word is clearly not ambiguous. For instance, surely nobody would want to maintain that the English *cousin* is ambiguous. Nevertheless, German has two different words: *Vetter* for a male cousin and *Base* for a female. To give one more, maybe slightly more contentious, example: Depending on what the adjective *awkward* is combined with, it receives different translations in German. Thus, (73a)-(c) receive the translations in (74a)-(c), with *awkward* being translated as *veflixt*, *peinlich*, or *linkisch*.

(73) a. This is a very awkward situation.
b. There was an awkward silence.
c. He's an awkward lad.

(74) a. Das ist eine verflixte Situation.
b. Es entstand eine peinliche Stille.
c. Er ist ein linkischer Junge.

In spite of *awkward* receiving three different translations, there is no reason to assume that it is actually ambiguous (or even polysemous). What the three German adjectives have in common is that they all attribute various kinds of difficulty or uncomfortableness to the nouns with which they combine. In other words, it seems at least possible that *awkward* means something quite general, e.g. "involving uncomfortable feelings". Whether this particular example works or not, I believe there is sufficient evidence to urge caution in drawing conclusions about the semantics of a word in one language on the basis of evidence from other languages – although other languages might act as an inspiration, the proof of the pudding has to

be found within one and the same language. In other words, the claim that *but* is ambiguous in English must be supported with evidence from English. This is, of course, what the discussion of different distributional properties aims to do.

However, showing, in effect, that correction *but* and denial *but* have complementary distributions is a curious way of supporting the ambiguity claim. Complementary distribution of senses across linguistic environments is clearly not a property of uncontentiously lexically ambiguous items. For instance, both senses of the word *bank* are possible in virtually any linguistic environment and there are certainly no syntactic constraints pertaining to one but not the other. Even in (75), where the linguistic context heavily biases things towards a 'financial institution' reading, *bank* could have its 'river bank' sense.

(75) Peter took the cheque to the bank.

However, it is difficult to find examples where English *but* could genuinely receive either a correction or a denial interpretation. Indeed, it seems to follow from A & D's arguments that it is always clear which interpretation *but* should receive from the linguistic environment in which it appears. So, there don't seem to be any genuinely ambiguous utterances containing *but*. The only conceivable environment in which *but* could receive either a correction or a denial reading is one in which ellipsis isn't possible, i.e. one in which the negated first clause and the second clause don't share any linguistic material at all. It seems that such utterances, e.g. (76), can only receive a denial interpretation.

(76) John didn't make a salad, but Jack bought a cake.

Quite clearly, this isn't because there is no convincing scenario in which a speaker might want to negate *John made a salad* and replace it with *Jack bought a cake* – there's nothing whatsoever wrong with the German *sondern*-utterance in (77), which has precisely that interpretation.

(77) John hat keinen Salat gemacht, sondern Jack hat einen Kuchen gekauft.

This shows that the reasons for believing that English *but* is ambiguous aren't nearly as good as they might at first seem. It seems, then, that the search for a unitary semantics for *but* might be worthwhile. The next few sections of this chapter are devoted to the discussion of analyses that have attempted to do just that and where better to start than with the father of Modified Occam's Razor.

5.7 *But* the Gricean way

In this section I will very briefly look at some approaches to *but* that could, roughly, be seen as Gricean. I start with what Grice himself did say and what he probably would have said if asked. This is followed by a look at Rieber's (1997) reinterpretation of the Gricean notion of conventional implicature and how this applies to *but*. Finally, I consider how Bach (1999) sees *but*. Even though these three approaches differ in some important aspects, they also share some interesting features. In particular, they all account for the meaning of *but* using a notion of contrast. Apart from the analyses discussed here, Rudolph (1996) and Fraser (1998) also use a general notion of contrast and, therefore, share many of the problems of the accounts I'm about to discuss.

Let me start with Grice. As already hinted at, he never actually gave a detailed analysis specifically of *but*. All he says is that *She was poor but honest* implies

> (very roughly) that there is some contrast between poverty and honesty, or between her poverty and her honesty.
>
> (Grice 1961: 127)

He also makes it clear that he regards this implication of contrast as neither part of what is said, i.e. the truth-conditional content of the utterance, nor as what he would later come to call a conversational implicature. Instead, he (1961: 129) maintains that "the fact that the implication obtains is a matter of the meaning of the word 'but'". In other words, the implication of contrast is what he (1975/1989: 25-26) later refers to as a conventional implicature. Since the notion of conventional implicature was discussed at some length in chapter 2, I will say no more about it here. Let me just say that it is most likely that Grice would say that *but* (like *on the*

other hand, discussed in 2.5.3) indicates the performance of a higher-order speech act of contrasting two ground-floor speech acts. However, it is difficult to see how the notion of contrast can account for all the different interpretations of *but*. At the very least, much more needs to be said about what counts as a contrast. At any rate, given his fondness for Modified Occam's Razor, my guess would be that Grice would have wanted to see the 'contrast' encoded by *but* in terms general enough to cover all possible uses of *but*, perhaps with more specific interpretations derived pragmatically.

Rieber (1997) has his own take on the notion of conventional implicature, which he sees in terms of parenthetical performatives. For instance, according to him (1997: 53), an utterance of (78) can be analysed as (79).

(78) Sheila is rich but she is unhappy.

(79) Sheila is rich and (I suggest this contrasts) she is unhappy.

Rieber (1997: 54) makes it clear that the contrast in question can be manifested in a variety of ways, i.e. it may be a contrast between the contents of the two clauses, or a contrast between implications of the clauses. It seems, therefore, that it is Rieber's intention to make the notion of 'contrast' general enough to cover all possible interpretations of *but*, which is precisely what I would have expected Grice to do. I will not discuss Rieber's treatment of *but* further, except for some general comments at the end of this section. Blakemore (2000) gives a comprehensive and convincing critique of Rieber's approach to *but* (and other discourse markers).

Finally, Bach (1999) completely rejects the notion of conventional implicature, opting, instead, for a framework in which single utterances can express multiple propositions. In other words, the meaning of *but* (and other 'non-truth-conditional' expressions) contributes to 'what is said'.[16] According to him (1999: 347), an utterance of (78), for example, expresses the three propositions in (80a)-(c).

(80) a. Sheila is rich.

b. Sheila is unhappy.

c. There is a certain contrast between being rich and being unhappy.

As this shows, Bach also opts for the notion of contrast in accounting for the meaning of *but* and he, too, ensures that 'contrast' covers as many interpretations of *but* as possible by making it as general as possible. The notion of a 'certain contrast' will be pragmatically enriched on particular occasions of utterance. For instance, in the case of (78), the contrast is likely to be that, in general, wealth combats unhappiness.[17]

All three accounts (and also those of Rudolph (1996) and Fraser (1998)) have in common the fact that they use a concept of contrast to account for the meaning of *but*: Grice himself might have seen *but* as indicating the performance of an illocutionary act of contrasting, Rieber sees it as indicating the performance of a speech act of suggesting a contrast, and Bach seems to see it as encoding the vague concept of 'a certain contrast'. It also seems that all three of them would at least try to account for the different interpretations or uses of *but* in the same terms, i.e. their notion of contrast has to be vague or general enough to cover a whole range of interpretations. This means that the job of defining 'contrast' is quite difficult. In fact, it is telling that neither Grice, nor Rieber or Bach actually make explicit what they mean by contrast. Intuitively, any two things in the world can contrast each other (just as any two things in the world will have some degree of similarity with each other). So, it seems unlikely that contrast will amount to something as straightforward as contradiction. In fact, I believe that it isn't possible to define the concept of contrast in terms that cover all possible uses of *but*. Instead, I shall argue that a functional or procedural account of the meaning of *but*, such as Blakemore's (1987, 1989) relevance-theoretic one, or the accounts of *but* as a cancellation marker or marker of denial discussed in the next section, are much better suited to the job of capturing a variety of uses or interpretations on the basis of a unitary semantics.

Furthermore, no matter how generally or vaguely it is defined, it is hard to see how contrast could cover correction *but*: Clearly, neither (81) nor (82) does justice to the meaning of (22a).

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[16] For a more detailed discussion of Bach's (1999) approach to 'non-truth-conditional' meaning, see 2.5.4.

[17] Neale's (1999: 58-59) view of *but* is very close to Bach's. He, too, believes that the 'contrast' encoded by *but* is only vague and has to be pragmatically enriched on particular occasions of use. As mentioned in 2.5.4, the two also agree on the issue of single sentence expressing multiple propositions.

(22) a. That isn't my sister but my mother.

(81) That isn't my sister and (I suggest this contrasts) that is my mother.

(82) a. That isn't my sister.

b. That is my mother.

c. There is a certain contrast between that not being my sister and it being my mother.

Finally, none of the accounts discussed above are equipped, as they stand, to deal with discourse *but* or *but* in utterance- or discourse-initial *but* – they all rely on *but* linking two clauses.

5.8 Functional views of *but*

5.8.1 *But* as a cancellation marker

Dascal & Katriel, D & K, (1977), provide what must be the first unified account of the meaning of *but*. This is particularly remarkable since they're mainly considering data from Hebrew, which, like German, Spanish, Finnish and Swedish, has two words for *but*, roughly corresponding to denial and correction *but*. Thus, it would be understandable if they, too, had reached the conclusion that *but* must be ambiguous. However, while recognising that Hebrew *aval* and *ela* perform subtly different functions, their analysis indicates that there is no reason at all to assume that English *but* can't be accounted for in a unified way.

The claim at the heart of D & K's (1977) analysis is that utterance meaning has several "layers",

> ranging from the more to the less explicit, from an inner 'core' of content to contextually conveyed implicatures *via* layers and sublayers such as presuppositions, modality, illocutionary force and felicity conditions.
>
> D & K (1977: 153)

The idea is that, generally, the speaker and hearer assume that all of these layers are conveyed simultaneously. The function of *but* in this framework is to indicate that not all of these layers are accepted by the speaker. As D & K (1977: 153) put it:

> The point of using an 'aval' or 'ela' utterance is to mark explicitly some particular separation between a pair of layers (or sublayers), or a contrast within a given layer. Such sentences foremostly indicate a refusal to accept all the layers of meaning of an utterance *en bloc*.

They then proceed to demonstrate the variety of layers of meaning that *aval* and *ela* can be used to cancel, covering the whole gamut from semantic presuppositions and assertions to conversational implicatures (via illocutionary force, modality and felicity conditions). In what follows, I give an example of each of these categories (indicating in brackets whether the particle used in the Hebrew example was *aval* or *ela*).

According to D & K (1977: 154-155), what B and C's utterances in (83) cancel is the minor assertion that the Pope is the only leader of the Christians, while in (84) they cancel the semantic presupposition that Dan beat his wife.

(83) A: The Pope, who is the only leader of the Christians, is elected by the cardinals.
B: That's right, but the Christians have other leaders. (*aval*)
C: He's not the only leader but one of the most important. (*ela*)

(84) A: Dan stopped beating his wife a long time ago.
B: But he has never beaten her. (*aval*)
C: He didn't beat her but only threatened to do so. (*ela*)

D & K (1977: 156) subdivide illocutionary acts into 'phrastic' (propositional content), 'tropic' (mood) and 'neustic' (commitment of the speaker to what she says). On this picture, the layer of illocutionary force consists of 'tropic' and 'neustic', both of which can be cancelled by *aval* and *ela*. For instance, D & K claim that B and C's utterances in (85) cancel A's commitment to the command she's issued (i.e. the 'neustic').

(85) A: Throw out all this material.
B: Okay, I'll throw it out, but I know that tomorrow you'll want it again. (*aval*)
C: You don't really mean that I should throw it out but just say so. (*ela*)

What is cancelled in (86), according to D & K (1977: 157) is the modal force of A's utterance.

(86) A: It is possible to postpone the exam for next week.
B: But three exams have already been set for next week. (*aval*)
C: It's not possible but obligatory. (*ela*)

(87) shows that *aval* and *ela* can cancel felicity conditions. Here, B and C's utterances cancel a preparatory condition of A's request, i.e. that the hearer is in a position to perform the required action (D & K 1977: 158).

(87) A: Open the door, please.
B: But it's open. (*aval*)
C: It's not closed but only looks closed because it's made of glass. (*ela*)

Finally, D & K (1977: 159) see *aval* in B's utterance in (88) as cancelling a conversational implicature of the first conjunct of her utterance. They don't give an example of *ela* cancelling a conversational implicature and it seems that that's not possible.

(88) A: What do you think of the new Prime Minister?
B: He has a clever wife but I don't mean to imply that there is anything wrong with him.

So far, I've only reported how D & K see *aval* and *ela* as functioning in similar ways, i.e. as cancellative operators. However, there are differences between the two – D & K (1977: 160-161) discuss the following three.

First, *P aval Q* functions to separate different layers of meaning, i.e. *P* indicates acceptance of one layer and *Q* indicates the rejection of another. An utterance of *P ela Q*, on the other hand, relates statements belonging to the same layer of meaning, i.e. *P* indicates the rejection of one element and *Q* indicates its replacement by another of the same order. Second, *ela* utterances are symmetrical in the sense that they explicitly mention both what is cancelled and its replacement,

whereas in *aval* utterances acceptance of one layer of meaning is often implicit. Finally, the function of negation in the first conjunct differs between *aval* and *ela* utterances. With *aval* if there is a negation in *P* it expresses a negative assertion, while it expresses denial, i.e. rejection of a previously made statement, in *ela* utterances. This tallies well with Anscombre & Ducrot's and Abraham's observations concerning the differences between correction *but*, which seems to correspond to *ela*, and denial *but*, which corresponds to *aval*.

Summing up, D & K (1977: 171) state that

> Both [*P aval Q*] and [*P ela Q*] utterances are to be primarily understood as reactive speech-acts, through which some cancellatory function relative to a prior utterance or its contextual equivalent is performed.

This quote brings out both the strong points and the weaker points of D & K's analysis. One of its weaker points is the claim that *but* utterances are reactive speech acts, which seems to imply not only that discourse-initial uses of *but* are impossible, but also that it is impossible to open a discourse with a complete *but* utterance, i.e. an utterance of the form *P but Q*. As seen above, both of these things are, of course, perfectly possible. Perhaps an explanation for such a counterintuitive conclusion lies with the kind of examples D & K consider: Unlike anyone else in the literature they base their analysis almost exclusively on examples that involve exchanges between two people with the *but* utterance being made as a reaction to an initial utterance. Now, while these uses of *but* are certainly possible, I doubt that they are as typical as D & K seem to think (though, of course, I can only speak for their frequency in English and not in Hebrew). Another point of D & K's analysis one might want to question is the detail of their view of the different layers of meaning. While it is standard practice to assume that utterances convey several propositions or assumptions, some explicitly and some implicitly, it is doubtful whether utterances actually communicate assumptions about their felicity conditions. However, these are relatively small worries. The great strength of D & K's analysis lies in providing a basis for a unitary semantic analysis of *but* in English. In the spirit of D & K, *but* could be seen as a general cancelling operator, which, unlike Hebrew *aval* and *ela*, doesn't encode any information about what "layer" of meaning is being cancelled. Bell (1998) provides just such an analysis of *but* based on Dascal & Katriel's work.

Bell (1998) analyses *but* (and other 'contrastive' markers) in terms of cancellation. According to him (1998: 527), a relation of cancellation obtains between two discourse segments, *P* and *Q*, if "an aspect of information derived from P is canceled in Q." and

> An aspect of information is any piece of information which is derivable, though not necessarily derived, by the hearer from the prior discourse context either globally or locally with respect to any feature of the act of communication such as propositional content, illocutionary force, perlocutionary effects in terms of face, politeness, mood, etc., and conversational conventions such as turn-taking and topic change.

Unlike D & K, Bell (1998: 528) seems to allow for the possibility of *but* cancelling aspects of information that don't just arise from immediately preceding linguistic material but as "operating on aspects of information within the global and local discourse context". This could be interpreted as saying that the information that is being cancelled doesn't necessarily have to be the result of communication, which would mean that Bell can account not just for utterance-initial but also for discourse-initial uses of *but*. However, Bell (1998: 529) doesn't seem to intend this, he states that "Cancellation, therefore, can be understood as acting on all aspects of communication". This seems to imply that *but* can't be used to initiate communication the way it does in (32).

(32) [Peter puts some salmon on Mary's plate]
Mary: But I'm allergic to fish. Rouchota (1998b: 25)

While Bell may have some difficulty in accounting for discourse-initial *but*, he has no problems explaining denial of expectation and discourse *but*. According to him, the (discourse) use of *but* in examples like (28) indicates the cancellation of the "topic domain" of the previous paragraph.

(28) A: We had a very nice lunch. I had an excellent lobster.
B: But did you get to ask him about the money?

He will, however, have some work to do to explain correction *but*: the *but*-clause in (22) certainly can be seen as cancelling something, i.e. the assumption that the

woman in question is the speaker's sister, but that something is quite clearly not part of what is communicated, at least not by the speaker uttering (22).

(22) a. That isn't my sister but my mother.

Furthermore, the way in which Bell (1998: 529) sees what is communicated, following coherence theory, is not entirely uncontentious. Nevertheless, I believe that, like Dascal & Katriel, Bell is essentially on the right track.

5.8.2 Denying various expectations

Foolen (1991) gives an account of *but* which has much to recommend it. He sees *but* as having functional meaning relevant to the integration of new information, i.e. the *but*-clause, into the previous discourse, i.e. the first clause and its context. In particular, he analyses *but* as indicating denial of expectation. As mentioned in section 5.2.3, he (1991: 84-85) argues that contrast or 'semantic opposition' uses of *but* still involve denial of expectation. He shows this using the examples in (89)-(91).

(89) A: John and Peter don't live in the same place, do they?
B: No, John lives in Amsterdam and/??but Peter lives in Rotterdam.

(90) A: John and Peter both live in Amsterdam, don't they?
B: No, Jóhn (indeed) lives in Amsterdam but/??and Peter lives in Rotterdam.

(91) A: Where do John and Peter live?
B: Well, John lives in Amsterdam and/but Peter lives in Rotterdam.

These examples show that *but* can only introduce the second clause in contexts in which it can be seen as denying an expectation. In (89), where there is an expectation that John and Peter don't live in the same place and, therefore, there is no expectation for the *but*-clause to deny, *but* sounds odd. In (90), on the other hand, where there is an expectation that John and Peter do live in the same place, which is

denied by the second clause, the use of *but* is more felicitous than that of *and*. Finally, in (91), either *but* or *and* can be used because there is no specific expectation apparent. However, Foolen (1991: 85) maintains that the use of *but* indicates that B thinks that A might have thought that John and Peter live in the same place (maybe because A asked about them in the same breath). I find Foolen's argument convincing. There does, indeed, seem to be a marked difference between the use of *and* and *but* in these examples (and in general). So, Foolen's account can deal with denial of expectation and contrast without any problems. How about the other uses of *but*?

Foolen's position on correction *but* is interesting, to say the least. He acknowledges that the difference between denial *but* and correction *but* could readily be seen as a case of polysemy, but he prefers to maintain that the denial of expectation function of *but* is its univocal core meaning and remains even in correction uses. According to him (1991: 88) correction *but* indicates "that the second conjunct denies the possible expectation that the previous, quoted, assertion might be a true one". And in his conclusion (1991: 90) he says that

> for example, *not big but small* might be paraphrased as: 'small and not big', "big" being a reasonable expectation on the basis of the previous discourse.

I believe that this creative way of looking at correction *but* is moving in the right direction. However, it cannot be right, because it can't explain metalinguistic cases. For instance, Foolen's paraphrase of the perfectly acceptable (92), would be the unacceptable (93).

(92) She's not happy but ecstatic.

(93) *She's ecstatic and not happy.

More generally, the idea that *but* denies an **expectation** seems too strong. It will be seen in section 5.11.2 that *but* can be used to deny assumptions that nobody expects and, more importantly, that nobody anticipates to be expected by anyone.

Even though Foolen doesn't consider discourse uses of *but*, I believe that his account could handle them. Arguably, the first paragraph of (29), the example from *The Guardian*, raises the expectation that the article is dealing exclusively with the

police's failure to use DNA technology, which is promptly denied by the second paragraph, which is about the police's illegally holding samples. Furthermore, utterance-initial uses of *but* present no problem for this account, because it analyses *but* as indicating the denial of an expectation raised (or supposedly raised) in the previous discourse, which may or may not have been produced by the same speaker. Unfortunately, Foolen's account, just like Dascal & Katriel's and Bell's, doesn't seem too well equipped to deal with discourse-initial uses of *but*. In the next section, it will be seen that Blakemore's relevance-theoretic account has no problems accounting for discourse-initial uses of *but*. In the final section of this chapter, I will propose a unitary account of the meaning of *but* that combines the best points of the functional analyses discussed in this section with the best points of Blakemore's account.

5.9 *But* as a constraint on relevance – Blakemore's account

5.9.1 Denial of expectation

Out of all the potentially different interpretations or uses of *but* Blakemore (1987, 1989) concentrates on denial of expectation and contrast.[18] She gives an account of *but* on both of those interpretations in procedural terms. While she gives the same account of denial *but* in 1987 and 1989, her analysis of contrast *but* changes in interesting and important ways. Let me start by looking at how she accounts for denial of expectation examples, such as (7).

(7) John is a Republican but he is honest.

According to Blakemore, the procedure encoded by *but* reduces the hearer's processing effort by pointing him towards the intended contextual effects of the clause it introduces. More precisely, *but* indicates that what follows contradicts and eliminates an available assumption. This means that *but* not only indicates to the hearer how the clause it introduces is relevant, but it also provides some evidence as to how the speaker thinks the hearer might have interpreted the previous clause (or discourse). *But*, on this picture, functions as a discourse connective, that is, the

[18] However, as will be seen below, she also considers utterance and communication initial uses of *but*.

structure of *P but Q* is really more accurately captured by *P. But Q* in parallel to *P. However, Q*, for instance. In other words, a speaker uttering (7), or any other denial of expectation example, makes two separate utterances. For instance, *John is a Republican* and *But he is honest.* In the case of (7), the fact that *but* indicates that *he is honest* contradicts and eliminates an accessible assumption may well mean that the speaker thought it at least possible that the hearer derived the assumption that John is dishonest from *John is a Republican.* In this case, the denial is direct, i.e. the proposition expressed by the *but*-clause directly contradicts (and eliminates) the assumption that John is dishonest.

Blakemore (1987: 129; 1989: 25-27) notes that the *but*-clause doesn't always deny an assumption directly, i.e. that it's not always the propositional content of the *but*-clause itself that contradicts the assumption. For instance, in (94) it is an implication of the *but*-clause that contradicts (and eliminates) an implication of the previous clause.

(94) John isn't an economist, but he is a businessman.

Say Jim utters this sentence in reply to Jack who's just suggested that they consult John on a financial matter because he is an economist. In this case, Jack may well infer from the first clause that they shouldn't consult John, the second clause, however, implies that they should consult John after all. Thus, the second clause has an implication that contradicts and eliminates an implication of the first. By using *but* to introduce the second clause, Jim indicates that the first clause may have led Jack to derive an assumption that is going to be contradicted. In this case, the denial is indirect.

The advantage of this account over, say, R. Lakoff's, Anscombre & Ducrot's, D & K's or Bell's is that it can handle not just utterance initial, but also discourse initial uses of *but.* This is because it only claims that *but* indicates that the clause it introduces contradicts and eliminates (or denies) an assumption accessible in the context, i.e. there is no requirement that the assumption has to have been communicated. In fact, it will be seen later that this point is crucial. Let me demonstrate how Blakemore's account works for B's utterance in (31) and Mary's utterance in (32).

(31) A: It's time for bed now.
B: But you said I could watch the end of Brookside.

(32) [Peter puts some salmon on Mary's plate]
Mary: But I'm allergic to fish.

There are (at least) two ways in which B's utterance (31) can be interpreted as a denial. It could be seen as (indirectly) denying the proposition expressed by A's utterance, i.e. as implying that it isn't time for B to go to bed. Another option is that B's utterance indirectly denies an implication of A's utterance – maybe something like *it's reasonable for A to ask B to go to bed now.* Note that there is a considerable amount of inferential work involved in deriving this kind of interpretation. (95) gives some idea of the kind of inferential process A has to go through in order to interpret B's utterance.

(95) a. I said to B "It's time for bed", thus implicating that she should go to bed.
b. My utterance also came with an implication that I have a right to tell B to go to bed and that it was reasonable for me to do so.
c. B has said to me "But you said I could watch the end of Brookside".
d. Brookside hasn't finished yet.
e. I did say that B could watch the end of Brookside.
f. It is an implication of my saying that, that B shouldn't have to go to bed yet.
g. It is unreasonable for me to tell B to go to bed now when I earlier told her something that has the implication that she doesn't have to go to bed now.
h. B is implicating that it's unreasonable for me to tell her to go to bed now and that she shouldn't have to do it.

This observation is particularly interesting because it seems unlikely that B's utterance without *but* could be interpreted in any other way than her *but*-utterance. However, the presence of *but* makes life easier for A, because it makes her look for a suitable assumption that B's utterance could be contradicting.

In (32), again, *but* indicates that Mary's utterance denies an accessible assumption. Since Peter hasn't actually communicated with Mary at all, this assumption can't be one he communicated. However, in the scenario in which he has just put a piece of salmon on Mary's plate it is relatively easy to access an assumption that is (indirectly) denied by her utterance. For instance, most people will put food on other people's plates with the expectation that the recipient is going to eat the food. Thus, Peter is highly likely to be entertaining the assumption that Mary will eat the salmon as he is putting it on her plate. However, Mary's utterance clearly implies that she won't eat the salmon, because she is allergic to fish. In this way, Mary's utterance denies an assumption Peter is likely to entertain. Again, Mary could have left *but* out of her utterance and it would have been likely to be interpreted the same way. By using *but*, however, she may well have saved Peter some processing effort, because the presence of *but* right at the beginning of her utterance alerts him straight away to the fact that the utterance is going to be relevant as a denial of an accessible assumption.[19]

5.9.2 Contrast

When it comes to dealing with "contrast" examples, such as (16), Blakemore's approach is less clear and straightforward than it is for denial of expectation uses of *but*. For one thing, she offers one analysis in her 1987 book and a slightly, but importantly, different one in her 1989 paper.

(16) John is tall but Bill is short.

Blakemore (1987: 137-138) essentially believes that *but* indicates that the clause it introduces is relevant as a denial in all instances. It may not be immediately obvious that this is the case in (16), but Blakemore (1987) makes a convincing case for her position. The key, she argues, is to consider in what kinds of circumstances someone would utter something like (16). The answer is that there are roughly two

[19] I fear that my way of putting this, and particularly my use of *alert*, makes it sound as though Peter will be very aware of what *but* indicates. I don't believe that that is the case. On the contrary, the procedure encoded by *but* will have its effect without Peter ever having to be aware of it at all. It will simply guide Peter's inferential processes along a certain path, maybe by making it more accessible than any other inferential path, i.e. by highlighting it in some way.

possibilities. The first is that, there is some reason to believe that one might take the first clause (i.e. *John is tall*) to imply that Bill is tall too (say, because they're twin brothers). In such a scenario, (16) would receive a straightforward denial of expectation interpretation: *Bill is short* directly denies an implication of *John is tall.* While this is a perfectly possible scenario, it is, perhaps, not the most likely. It is much more likely that (16) will be uttered to convey something like 'Bill isn't like John'. In such a case, what the *but*-clause denies, according to Blakemore (1987: 138), is the consequent of a conditional premise. This conditional premise will be something like 'If Bill is like John, then he is tall'. By denying the consequent of this premise, the *but* clause gives rise to the implication that Bill isn't like John. However, she doesn't give a complete explanation of why this conditional assumption concerning the ways in which John and Bill are alike (rather than one concerning ways in which they differ) should be accessed. I'll return to the question of how "contrast" uses of *but* can be accounted for in section 5.11.

As mentioned above, Blakemore's (1989) account of "contrast" *but* is different from her (1987) account. It seems that she (1989: 17) now believes that *but* has more than a single meaning and that the interpretation of "contrast" cases involves a different procedure from the one involved in denial uses. The most important difference between the two meanings of *but* is that *but* is seen as a discourse connective only on a denial of expectation reading, while contrast *but* is a conjunction. That is, where Blakemore (1987) saw *P. But Q.* as the 'real' structure of *P but Q* on either reading of *but*, she now sees it as applying only to "denial" *but.* The structure of a *but* utterance on the "contrast" reading, she now maintains, is conjunctive, i.e. captured adequately by *P but Q.* What the "contrast" *but* in (16) indicates, according to Blakemore (1989: 34), is that the hearer should derive a proposition of the form *not (F(Bill)).* It is the function of the first clause to give the hearer access to a property *F* whose ascription is negated in the second clause.

5.10 One or two constraints?

Given the discussion in the preceding section, the question is whether *but* really is ambiguous or whether Blakemore (1987), framed in the Gricean spirit, was right.

My first step towards answering this question will be to examine the reasons for Blakemore's change of heart from 1987 to 1989.

It seems that there are two reasons. The first is the mistaken assumption that there are a number of languages, e.g. German, Spanish and Hebrew, that use two different lexical items to express contrast and denial of expectation. As seen above, while these languages do indeed have two (or more) lexical items to express different uses or interpretations of English *but*, they use the same expression for denial and contrast. For instance, our standard denial example (7) is translated using *aber*, as (42) shows, and (96) demonstrates that (16), our standard contrast example, is also translated using *aber*.

(42) John ist Republikaner, aber er ist ehrlich.

(96) John ist gross, aber Bill ist klein.[20]

Of course, the distinction between *aber* and *sondern*, *pero* and *sino*, and *aval* and *ela* is not one between denial and contrast, but one between denial and correction, so cannot provide evidence of any sort for the correct treatment of the denial and contrast cases. Also, as discussed in section 5.6, the general shape of this sort of argument from lexical distinctions to an ambiguity in another is not compelling.

Blakemore's second reason seems to be based on the assumption that, while an utterance with denial *but* isn't really a conjunction, contrast *but* is truly conjunctive (I'll look at Blakemore's reasons for thinking this shortly). Another way of putting this is that, according to Blakemore (1989) contrast *but* has *and* as part of its meaning, while denial *but* doesn't. If this is true, then it seems almost impossible to treat *but* as monosemous, or even polysemous. It is hard to see how one and the same lexical item could function both as conjunction and as discourse connective, although, of course, the ambiguity will be of a semantically uninteresting kind if the conjunction *but* and the discourse connective *but* both encode the same constraint. It is not clear to me whether this is Blakemore's (1989) stance or not.

As mentioned above, Blakemore's (1989) belief that contrast *but* does contain *and* as part of its meaning also constitutes a shift in her approach. In her book (1987:

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[20] There is a possible complication here, in that the translation of (16) could also be *John ist gross. Bill, aber, ist klein*, in which case a denial of expectation reading is ruled out and *aber* seems to be closer to *on the other hand* (or German *hingegen*).

139), she maintains that *but* doesn't mean '*and* plus something else' on either of the uses she discusses. To non-relevance theorists even the question whether or not *but* amounts to '*and* plus something else' must seem a bit of a mystery. As mentioned right at the beginning of this chapter (in section 5.2.1), any utterance of *P but Q* is true just in case *P* is true and *Q* is true. In other words, truth-conditionally, *P but Q* clearly is equivalent to *P and Q*. However, if a speaker utters *P. Q*, then, surely, the full content of what she uttered will be true just in case *P* is true and *Q* is true. In other words, truth-conditionally the juxtaposition of *P* and *Q* seems to be equivalent to *P and Q*, too. This means that the question of whether or not the meaning of *but* includes the meaning of *and* is not a question of truth-conditional import – in a way, if one analyses *and* as having no linguistic meaning beyond that of the truth-functional operator &, nothing very interesting has been said, and *but*, and a whole host of other conjunctions (e.g. *although*, *while*, *so*, etc.), can be analysed as having it as part of their meaning.

The important aspect of *and*, as far as Blakemore is concerned, is its import in relevance-theoretic terms. According to Blakemore (1987: 120), the point about conjoined utterances is that

> a hearer who is presented with a conjoined utterance cannot be expected to undertake the processing entailed by the use of *and* unless the conjoined proposition that is expressed has relevance over and above the relevance of each conjunct taken individually.

The assumption this is based on is that a speaker who utters *P and Q* makes one single utterance, which expresses one single proposition, while a speaker who utters *P.Q* makes two utterances, each of which expresses one proposition. Since the hearer is entitled to expect every utterance of the speaker's to be relevant enough to be worth the effort needed to process it (as stated in the communicative principle of relevance), a hearer confronted with a conjoined utterance is licensed to assume that the complete utterance is optimally relevant, but there is no guarantee that the individual conjuncts will be relevant in their own right. Now, cutting a long story short, the point is that denial of expectation *but*, and, according to Blakemore (1987), also contrast *but*, indicates the way in which the *but*-clause achieves relevance. In other words, *but* guarantees that the second 'conjunct' is relevant in its own right – a

fact that Blakemore seems to believe is incompatible with the assumption that a *but*-conjunction expresses a single conjoined proposition.

Blakemore (1987: 135) gives another argument against *but* (at this point specifically contrast *but*) encoding '*and* plus something else'. She points out that it is a well-known, but unexplained, fact that *and* can conjoin any number of elements, while *but* can only ever link two. For instance, (97) can be understood to link all four conjuncts symmetrically, while *but* in (98) can only be seen as contrasting the last clause with the conjunction of all the others[21].

(97) Mary votes Labour, Susan votes Lib Dem, Anne votes Tory, and Jane votes for the BNP. (adapted from Blakemore 1987: 135)

(98) Mary votes Labour, Susan votes Lib Dem, Anne votes Tory, but Jane votes for the BNP.

Blakemore (1987: 136, 1989: 32) rightly points out that if there is a *but* that does nothing other than express a contrast between two things, then there is no reason at all why it shouldn't also be capable of expressing a contrast between more than two things. After all, it is possible to contrast any number of things with each other. For instance, there is a reading of (97) on which the four conjuncts are all contrasted with each other, i.e. in which the hearer will be expected to derive four sets of contrasting implications, or, indeed, just the assumption that Mary, Susan, Anne and Jane all hold different political beliefs.

Let me consider these points in turn, it seems to me that the mere fact that *but* can't be seen as linking more than two units doesn't mean that it isn't a conjunction. After all, it could just (and, indeed, it is likely to) be the case that the "something else" that *but* encodes is of a nature that only allows a "connection" between two entities. For instance, if *but* is analysed in terms of cancellation (or denial), then it follows quite naturally that it can only 'link' two entities: one entity is cancelled and the other is doing the cancelling. At least syntactically, *but* seems to be no different from *and*, in that it can at least occur in a list of more than two entities (though see

[21] This difference between *and* and *but* is also apparent in the fact that constructions of the form *P and Q and R and S* are perfectly acceptable, while the acceptability of *P but Q but R but S* is rather more doubtful.

footnote 21), which is something that isn't possible with other 'connectives', such as *although* – there is something distinctly odd about (99)[22].

(99) Mary votes Labour, Susan votes Lib Dem, Anne votes Tory, although Jane votes for the BNP.

So, why has Blakemore (1989) come to believe that contrast *but* is a conjunction, while denial *but* is a discourse connective? There seem to be two reasons for this. First, she observes that the suggestion of contrast conveyed by *but* in (16) can also be conveyed by juxtaposed sentences, as in (100), and, more significantly, by the *and*-conjunction in (101).

(16) John is tall but Bill is short. (R. Lakoff 1971: 133)

(100) John is tall. Bill is short.

(101) John is tall and Bill is short.

Blakemore (1987: 131, 1989: 26) maintains that, on the other hand,

> if it hadn't been for the use of *but* in [(7)]the hearer might never have accessed the contextual assumption(s) necessary for the derivation of [the assumption that is denied by the *but*-clause, i.e. *John is dishonest*].

(7) John is a Republican but he is honest. (G. Lakoff 1971: 67)

(102) John is a Republican. He is honest.

It is indeed true that a speaker wishing to convey what (7) conveys would be very uncooperative, if she just uttered (102), though it's certainly possible to derive this interpretation from (102). Even more interestingly, (103), the conjoined counterpart of (7) and (102), can also be interpreted in the same way, particularly if it is uttered with stress on *honest*.

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[22] No doubt this oddity is due to the fact that *although* is a subordinating conjunction, while *but* is a co-ordinating connective. More will be said about this difference between *but* and *although* in chapter 6.

(103) John is a Republican and he is hónest.

All of this suggests that Blakemore's first argument for treating only contrast *but* as a conjunction is not very convincing – contrast *but* and denial *but* behave in exactly the same way with regard to whether or not the 'connection' they express can also be expressed by juxtaposed or conjoined sentences.

A further argument in favour of treating only contrast *but* as a conjunction is that *P but Q* can be embedded in the scope of a logical operator, such as *if...then*, only if *but* is interpreted as indicating contrast and not if it signals denial of expectation (Blakemore 1989: 28-29). Thus, she claims that *but* in (104) could not be construed in its denial of expectation sense.

(104) If Susan is coming but Anne is not, then I shall cancel the lecture.

There are two reasons for not accepting this argument. First, I believe that *but* in (104) could easily be understood in its denial sense. It could, for instance, be uttered in reply to A's utterance in the scenario in (105), where *but* is clearly used to indicate the denial of an assumption derived from the first clause.

(105) Scenario: As is well known to A and B, Anne goes wherever Susan goes.
A: Susan is going to the lecture but Anne isn't.

Furthermore, I absolutely agree with Rouchota (1990: 71) that even clear denial of expectation uses of *but* can be embedded under the scope of *if...then*. For instance, (106) is every bit as acceptable as (104).

(106) If John is a Republican but he is honest, there is hope for the Republicans yet.

The overall conclusion from this section is that there is no reason at all to believe that the contrast and denial uses of *but* are anything other than just that, i.e. two different uses of one and the same lexical item, which may or may not have *and* as part of its meaning. In other words, there is no reason at all to believe that Blakemore (1987) was wrong in claiming that *but* encodes a single constraint on the interpretation of its host clause. In the final section of this chapter I will suggest how Blakemore's

analysis can be modified to give a more explicit unitary semantics for *but* and I will demonstrate how a single constraint can account for all the interpretations of *but* that have been listed in section 5.2

5.11 Building on Blakemore

5.11.1 Arguments for a procedural account

If one thing is clear from the discussion in this chapter, it is that any unitary account of the meaning of *but* has to be quite general and abstract in order to capture the wide variety of uses and interpretations this connective can be given. I would argue, in line with Blakemore (1987, 1989), that this can only be achieved if one assumes a procedural semantics for *but*. As indicated in section 5.7, one of the arguments in favour of this is that the task of finding a concept *but* could encode which is general enough to capture all its uses is very difficult, if not impossible. Furthermore, examining *but* in the light of the three tests for procedural meaning identified in 4.3.3 yields more evidence in favour of it encoding procedural meaning.

First, I would argue that most English speakers would find it hard to answer the question "what does *but* mean?". Surely, it is easier to answer "how is *but* used?". This indicates that the meaning of *but* is of a procedural nature and can't easily be brought to consciousness in the way that conceptual components can. Second, whatever exactly it is that *but* conveys – it's not truth-evaluable. For instance, B's reply in (107), which is objecting to the 'contrast' or 'incompatibility' between *John is a nice guy* and an assumption prompted by *John is gay* suggested by *but*, is not felicitous. B' shows that this isn't because this suggestion is intrinsically something that can't be objected to.

(107) A: John is gay but he's a nice guy.
B: *That's not true – there's no incompatibility between him being nice and him being gay.
B': Come on. You can't seriously suggest that being gay is incompatible with being nice.

The final test is that of compositionality, where the argument is that conceptual expressions easily combine with other conceptual expressions to form larger conceptual representations, while procedural expressions don't enter into this kind of compositional construction. It seems that *but* can't combine with anything else[23]. However, the problem is that there isn't much one can compare *but* with. As far as I'm aware, the only other co-ordinating conjunction in English is *and*, which can't be combined with anything either. So it looks as if there is something about the syntactic status of co-ordinating conjunctions that doesn't allow anything to modify them. It is even difficult to find examples in which descriptive negation applies just to *and* or *but*. (108) is my attempt at making a negation apply just to *and*.

(108) He didn't paint the hallway AND strip the floorboards – because two hours isn't enough to do both.

Obviously, the difficulty here is that *and* doesn't have any encoded meaning beyond that of the truth-functional connective & and so it is difficult to see what the negation could be negating. Indeed, Carston (forthcoming b, section 4.7.2) presents an interesting and attractive argument in favour of the assumption that *and* has no linguistic meaning at all (whether conceptual or procedural) and that its truth-functional properties and its propensity for pragmatic enrichment to temporal and causal interpretations can be explained purely by its syntactic function as a co-ordinating conjunction. If this is the case, as I think it may well be, then the question, discussed at some length above, of whether *but* contains *and* as part of its **meaning** becomes otiose. Furthermore, it is clear that no linguistic element whatsoever can in any way combine its meaning with that of *and* to yield a complex meaning.

Leaving the question of the compositionality of the meaning of *and*, it seems that, although *but* obviously does have linguistic meaning, that linguistic meaning is not compositional – (109) demonstrates that descriptive negation clearly can't apply just to *but*.

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[23] Of course, in a trivial sense of the word, *but* and *and* are both "compositional". That is, they both combine with other linguistic elements to form sentences. The kind of compositionality at issue here crucially involves the interaction of meanings modifying each other.

(109) ??John isn't gay but he's a nice guy – (because) there's nothing incompatible between his niceness and his sexuality.

All in all, then, there is a lot of good evidence in favour of *but* encoding a procedure rather than a concept. The million dollar question now is, of course, what that procedure is.

5.11.2 Denying accessible assumptions

I would like to suggest that what I take to be Blakemore's (1987) position is essentially right and just needs some minor modification and further spelling out, and application to the full range of examples. In other words, I believe that *but* indicates that the clause it introduces is to be processed as a denial, i.e. as an assumption that, either directly or indirectly, contradicts and eliminates an assumption accessible in the context. This differs from Blakemore's account of denial *but* only in one important detail. According to Blakemore (1987: 129),

> [...] *but* is a denial [...] of a proposition which, although not part of the propositional content of the sentence just uttered, is understood as being part of its **interpretation**. (my emphasis)

In other words, on her account, the denied assumption is taken to be **manifest**. Recall that, according to Sperber & Wilson (1986: 39) an assumption is manifest to an individual at a certain time just in case she is capable of entertaining it and accepting it as true or probably true. What I mean by "accessible in the context" is something weaker than that. That is, by saying that the *but*-clause denies an assumption which is accessible, but not necessarily manifest, I mean that the assumption must merely be 'entertainable' and doesn't necessarily have to be accepted as true or probably true. Indeed, sometimes it is more likely to be deemed false or probably false. In other words, the denied assumption is merely one that the speaker judges to be likely to occur to the hearer for consideration in the context.

Of course, more often than not, the accessible assumption will also be manifest. For instance, in the standard denial of expectation examples (1) and (13), the denied assumptions, i.e. *Peter didn't go out* and *the speaker doesn't want to go*

for a walk are highly likely to be manifest (and not just accessible) at the time the *but*-clause is uttered.

(1) It was raining but Peter went out.
(13) It's raining but I need some fresh air.

However, there are a range of circumstances in which assumptions are accessible while being the very opposite of accepted as true or probably true (i.e. manifest). I am, of course, thinking of negative and subjunctive utterances, for example. It is generally accepted (as discussed in section 3.5.3.2) that negative utterances make immediately accessible their positive counterparts. For instance, (110) makes accessible (111).

(110) John doesn't eat chocolate.
(111) John eats chocolate.

Similarly, the subjunctive utterance in (112) makes accessible the assumption in (113).

(112) John could be brilliant.
(113) John is brilliant.

So, (111) and (113) are both accessible in the context of the utterances in (110) and (112), respectively, but quite clearly neither of them is manifest, i.e. accepted as true or probably true, either to the speaker or the hearer.

The point of the above discussion is that in cases of correction *but* the denied assumption is just accessible and not manifest. For instance, in (22a) *that is my mother* denies *that is my sister*, which is accessible but not manifest on the basis of the utterance of *that isn't my sister.*

(22) a. That isn't my sister but my mother.

The claim that *but*-clauses can deny assumptions that are merely accessible and not manifest is further strengthened by the acceptability of utterances like (114), where

John isn't brilliant denies the assumption *John is brilliant*, which is clearly not manifest on the basis of *John could be brilliant*, but equally clearly is accessible.

(114) John could be brilliant but he isn't.

So far, I hope to have shown that the general constraint I believe *but* encodes, i.e. 'process the clause that follows as a denial of an accessible assumption', can account for denial of expectation and correction uses of *but* without any difficulty. I believe that Foolen is probably right in claiming that all so-called 'contrast' uses of *but* can be analysed in terms of denial of expectation. However, if he weren't right, there's still a way my account could deal with such examples. For instance, take an utterance of (16).

(16) John is tall but Bill is short. (R. Lakoff 1971: 133)

Obviously, it is possible that this utterance is processed in a context in which *John is tall* makes **manifest** the assumption that Bill is tall, too. However, it is at least conceivable that it could be processed in a context in which this assumption is merely **accessible**. It seems plausible that an utterance of *John is tall* gives access to a schema of the form *X is tall*. Now, at the point at which the hearer has reached *Bill* in her processing of (16) it seems at least possible that he will access the assumption *Bill is tall*, maybe just for a split second. After all, he has the schema *X is tall* readily accessible and *Bill* provides an obvious value for *X*.

It should be clear that my general constraint can also account for discourse *but* (along the lines I suggested that Foolen's analysis could account for it) and utterance- and discourse-initial uses of *but*. For instance, whether or not Peter, in (32), puts the salmon on Mary's plate ostensively, the assumption that he expects her to eat it is highly accessible (in normal circumstances) and most likely also mutually manifest to Mary and Peter. Therefore, it is easy for Peter to realise that it is this assumption that Mary's utterance is intended to deny.

(32) [Peter puts some salmon on Mary's plate]
Mary: But I'm allergic to fish.

This means that there is a unitary account of the semantics of the connective *but* that can capture all its possible uses and interpretations. On the basis of my arguments in section 5.6.3, I propose that this account is to be preferred to any accounts that postulate ambiguity or polysemy.

Finally, one might object to my account of *but* that it is so general that it should be possible to felicitously use *but* to connect just about any two clauses under the sun. To this I would reply that, in the right context, just about any two clauses under the sun can be connected by *but* with felicitous results. The acceptability of the resulting utterance will, as always, depend on whether or not it is consistent with the communicative principle of relevance. An utterance of *P but Q* will be judged 'infelicitous' if the hearer cannot decide which one of a range of possible accessible assumptions the *but*-clause is supposed to deny or if he can't find a highly accessible assumption the *but*-clause could conceivably deny. I would predict, however, that that doesn't happen all that often in the real world (example sentences in academic papers are, of course, another matter).

CHAPTER 6
CONCESSIVES II: *ALTHOUGH*

6.1 Differences between *but* and *although*

In the introduction to chapter 5 I observed that (1a) and (b) receive the same 'concessive' interpretation as (2).

(1) a. Peter went out although it was raining.
b. Although it was raining, Peter went out.

(2) It was raining but Peter went out.

This is reflected in much of the literature, where *Q although P/Although P, Q* is treated as having a subset of the interpretations possible for *P but Q*. For instance, König (1985) describes *P but Q* as the prototypical means of expressing an 'adversative' relation, while he sees *Q although P/Although P, Q* as the prototypical 'concessive' expression. According to him (1985: 4), concessives have the properties in (3).

(3)

typical form:	although *P*, *Q*
entailments:	*P*, *Q*
(non-logical) implication:	Normally (if *P*, then not-*Q*)

He (1985: 6) analyses 'adversatives' in line with Anscombre & Ducrot's (1977) account of denial *but*, i.e. in parallel to the account given of concessives above, adversatives have the properties in (4). In other words, 'adversative' interpretations are the same as what I called indirect denial interpretations of *but* in chapter 5 and 'concessive' interpretations amount to the same as direct denial. That is, concessives are a special case of adversatives, which is reflected in their non-logical implications.

(4) *typical form:* *P* but *Q*

entailments: *P*, *Q*

(non-logical) implications: $P \rightarrow R$, $Q \rightarrow$ not-*R*, *Q* carries more weight

This may make it seem as though König is claiming that *but* expresses an adversative relation, while *although* expresses concessivity. However, he makes it clear that not only can *but* express a concessive relation but *although* can express adversativeness.

So, do *Q although P*/*Although P*, *Q* and *P but Q* have the same meaning? König certainly thinks that they do as far as truth-conditional content goes – the entailments in (3) and (4) are exactly the same. Indeed, intuitions support this view: The truth of *P* and the truth of *Q* are jointly sufficient for the truth of both, *Q although P*/*Although P*, *Q* and *P but Q*. For instance, an utterance of (↑a) or (b) will be true just in case Peter went out and it was raining. (5) shows that the embedding test supports this – a speaker uttering this will be taken to say that the reason Peter got wet is that it was raining and he went out at the same time, and the assumption that Peter doesn't normally go out in the rain doesn't enter into the picture.

(5) Because Peter went out although it was raining, he got wet.

Given that *but* and *although* can express the same relation and that (1) and (2) seem to receive the same interpretation, it looks as though there is no difference in meaning, truth-conditional or otherwise, between *Q although P*/*Although P*, *Q* and *P but Q*. So, it should be possible to give an analysis of the meaning *although* along similar lines to the analysis I have proposed of the meaning of *but*. However, this conclusion is, at best, hasty and, at worst, fallacious.

First of all, there are some clear syntactic and semantic differences between *but* and *although*. Possibly, the most obvious one is that in order to achieve the same interpretation for *Q although P*/*Although P*, *Q* and *P but Q*, *but* must introduce *Q*, while *although* introduces *P*. If they both introduce the same clause, the *although* utterance receives a radically different interpretation from the *but* utterance – as (6) demonstrates.

(6) a. It was raining although Peter went out.[1]

b. Although Peter went out, it was raining.

This may seem a painfully obvious point but it is, nevertheless, worth making, particularly in the 'light' of Fraser's (1998: 314) insistence that (7a), (b) and (c) are all equivalent.

(7) a. She fried the onions, but she steamed the cabbage.

b. She fried the onions. However, she steamed the cabbage.

c. She fried the onions, although she steamed the cabbage.

The second obvious difference between *but* and *although* is that the former is a co-ordinating conjunction, while the latter is a subordinating conjunction. This distinction is brought out by a number of syntactic tests. First, only subordinate clauses can be preposed. For instance, while (1b) is perfectly acceptable, (8) is clearly ungrammatical.

(1) b. Although it was raining, Peter went out.

(8) *But Peter went out, it was raining.

Second, according to Green (1976: 385), negative NP preposing, as in (9), is only possible within a main clause.

(9) Not for a moment did she hesitate.

This test, too, brings out a clear difference between *but* and *although*: (10) is perfectly acceptable, while (11) is ungrammatical.

(10) The cliff was high but not for a moment did she hesitate.

(11) *Although not for a moment did she hesitate, she was quite frightened.

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[1] This sentence might not strike the reader as acceptable – at least at first, it seems to suggest that Peter has the power to influence the weather (i.e. that the non-logical implication is 'Normally, if Peter goes out, it isn't raining'). I will discuss this type of example at some length later on in this chapter. For the moment, I'd like to point the reader to (6b) for an acceptable interpretation of this combination of *P* and *Q*.

These tests clearly show that *but* is a co-ordinating conjunction, while *although* is a subordinating conjunction[2]. This observation combined with the first one (i.e. that for the same interpretation to be maintained, *although* must introduce *P* where *but* introduces *Q*) provides sufficient reason not to analyse *although* along the same lines as *but*. However, even without those observations, no one would want to claim that *but* and *although* are completely synonymous, for it is only in a relatively restricted subset of examples that *although* can replace *but* (obviously, once the necessary syntactic changes have been made). This is illustrated in the next section.

6.2 Interpretations of *Q although P*/*Although P, Q*

6.2.1 When can *Q although P*/*Although P, Q* and *P but Q* receive the same interpretation?

In order to bring out further differences between *but* and *although* I will look at the range of interpretations that *but* can receive, as discussed in 5.2, and see whether *although* can replace *but* in all cases, once the necessary syntactic changes have been made. (1) and (2) have already shown that *although* can do duty for direct denial of expectation *but*. (12) and (13) show that this also goes for indirect denial, where *R* is *I'll go for a walk*, for instance. Here, there is an interesting difference between (13a), where the subordinate clause is postposed, and (13b), where it is preposed. The latter is slightly, but noticeably, more acceptable than the former. I will suggest an explanation for this in section 6.5.

(12) It's raining but I need some fresh air.

(13) a. I need some fresh air although it's raining.

b. Although it's raining, I need some fresh air.[3]

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[2] For a discussion of further tests that distinguish between subordinate and co-ordinate clauses see Rouchota (1998b: 45-47).

[3] Note that *even though* can generally replace *although* without a change in meaning. However, some people feel that the use of *even though* always makes a 'direct denial' interpretation more accessible. For them, utterances like *He has long legs, even though he is a bit short of breath* border on the unacceptable. I'll leave the question of whether *although* and *even though* are synonymous for another time.

As (14) and (15) illustrate, R. Lakoff's (1971) "semantic opposition" can also be expressed using *although*, but this shouldn't be surprising since I argued that this use can be reduced to denial of expectation. Again, there is a slight difference in interpretation or acceptability between (15a) and (b) – the former is more likely to be interpreted as involving direct denial, and the latter as involving indirect denial.

(14) John is tall but Bill is short.

(15) a. Bill is short although John is tall.

b. Although John is tall, Bill is short.

As (16) and (17) show, *although* doesn't have a correction use: (17a) is completely unacceptable and (17b) is only acceptable on a denial of expectation reading (e.g. one on which *that isn't my sister* is taken to imply something like *that isn't one of my relatives*, which is then denied by *that is my mother*).

(16) She isn't my sister but my mother.

(17) a. *She is my mother although not my sister.

b. Although not my sister, she is my mother.

If, as I claimed in the last chapter, compensatory uses of *but* essentially amount to (indirect) denial of expectation, one would expect these, too, to be able to be expressed by *although* (with utterances of the form *Although P, Q* slightly more acceptable than those of the form *Q although P*). (18) and (19) show that they, indeed, are.

(18) He is a bit short of breath but he has long legs.

(19) a. He has long legs although he is a bit short of breath.

b. Although he is a bit short of breath, he has long legs.

It seems unlikely that *although* could replace *but* on its discourse use. Recall, that discourse *but* is analysed as introducing a new paragraph and signalling a return to the main topic of the discourse. Since *although* would actually have to introduce the preceding paragraph to parallel the examples discussed so far, and, more importantly,

since *although* is a subordinating conjunction and subordinate clauses can't stand on their own, *although* couldn't do the job of *but* in contexts in which it receives a discourse interpretation.[4]

Finally, utterance- and discourse-initial uses of *but* can't be replaced by *although* for obvious reasons. As mentioned above, *although* actually has to introduce the first clause, rather than the *but*-clause for the same interpretation to be preserved when replacing *but* with *although*. However, in utterance- and discourse-initial uses of *but* there is by definition no first clause. So, it is clear that there couldn't possibly be a case of *although* replacing *but* in utterance- and discourse-initial positions. Still, this doesn't rule out the possibility that an isolated *although*-clause could occur utterance- or discourse-initially in its own right. However, this doesn't seem to be possible. Mary's utterances in (20) and (21) are not exactly acceptable.

(20) Mary [catching Peter munching his way through a box of chocolates]:
*Although you're on a diet./?Although you're on a diet?

(21) Peter: I think John is wonderful.
Mary: *Although he cheated on you./Although he cheated on you?

Notice, however, that (at least for some speakers) Mary's utterances can become acceptable, particularly in (21), when uttered with the appropriate interrogative intonation contour.

To sum up the discussion so far, it seems that *although* can do duty for *but* just as long as the intended interpretation is one of denial of expectation and that direct denial lends itself more to being expressed by *Q although P* than indirect denial. So, it seems that *although* must be given its very own analysis, which must take into account its status as a subordinating conjunction and which can explain why *although* can be used to express some of the same things as *but* but not others.

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[4] However, there might be something amounting to discourse *although*. Exchanges like that in (i) can sometimes be observed.

(i) A: This is a really nice house.
B: Although, I'm not sure that it's structurally sound.

Of course, this could be a performance error or a shift in use.

6.2.2 *Although* in three domains

Sweetser (1990: 78-79) sees what she calls 'adversative' connectives, such as *although* and *despite*, and causal connectives, such as *because* and *since*, as being able to function in three domains: **real-world** (or **content**), **epistemic** and **speech-act**. (1a) and (22) are examples of *although* and *because* operating in the **real-world** or **content** domain. That is, the relations they express hold between states of affairs in the real world.

(1) a. Peter went out although it was raining.
(22) Peter got wet because it was raining.

In the case of (22) this is relatively easy to see; the relation expressed is one of real-world causality, i.e. the rain caused Peter to get wet. It's a bit harder to see in what sense the 'adversative' relation expressed by *although* in (1) holds in the real world. In order to make clearer the real-world nature of the connection in such examples Sweetser (1990: 79) provides a paraphrase. Analogous to her own examples, the paraphrase for (1), which is not one of the examples she considers, would be something like (23).

(23) Peter's going out occurred in spite of the rain, which might naturally have led to his not going out.

This shows that *although* doesn't actually express a real-world relationship between two states of affairs in the way *because* does. Instead, the relationship *although* expresses is one that exists in the speaker's mind and is based on her knowledge of a real-world causal relation between the state of affairs described in the subordinate clause and the negation of the main clause. In other words, the real-world relationship in (1) doesn't hold between Peter's going out and the rain, but rather between the rain and Peter's not going out. In fact, while real-world causality clearly exists, it is doubtful whether there is such a thing as real-world 'adversativeness'.

Sweetser (1990: 103-104) herself speculates that there probably is no real-world use of *but*, because there is no real-world relation of contrast. Given that she is happy to accept that *although* has a real-world use, this seems quite curious.

Particularly, since (2) shows that *but* can perfectly well be used to express the relation expressed by *although* in (1).

(2) It was raining but Peter went out.

It seems to me that it is quite likely that there is no real-world use of *although*, at least not in the same way in which there is a real-world use of *because*.

In (24), *because* operates in what Sweetser calls the **epistemic** domain.

(24) It's been raining, because Peter is wet.

That is, rather than expressing a causal relation between two events or states of affairs in the world, it expresses a causal relationship between the speaker's knowledge that Peter is wet and the conclusion that it's raining. *Although* in (6a) could be seen as operating in the epistemic domain, too.

(6) a. It was raining although Peter went out.

Sweetser's (1990: 79) paraphrase of this example would be something like (25).

(25) The fact that it was raining is true in spite of the fact that Peter went out, which might reasonably have led me to conclude that it wasn't raining.

Again, the epistemic relationship doesn't so much seem to hold between the two conjuncts as it does between the subordinate clause and the negation of the main clause.

Finally, (26) gives an example of *because* applying to Sweetser's speech-act domain.

(26) Is it raining, because Peter looks wet.

Here, *because* expresses a causal relation between the state of affairs described in the subordinate clause and the speech-act performed in the main clause. In other words, the fact that Peter looks wet is the speaker's reason for asking whether it's raining.

In (27), *although* applies to the speech-act domain. Sweetser's gloss for this kind of example is given in (28).

(27) Is it raining, although I'll have to go out anyway.

(28) I ask you if it's raining in spite of the fact that I have to go out anyway.

It seems, then, that the question is what exactly do *P* and *Q* in *Q although P* and *Although P, Q* stand for. From Sweetser's discussion one could conclude that she would advocate that *Q although P* can have (at least) three different non-logical implications, i.e. one of (29)-(31), where *X* is the proposition expressed by *P* and *y* that expressed by *Q*, depending on whether *although* is understood as operating in the real-world/content, the epistemic or the speech-act (SA) domain.

(29) Normally (*X* causes not-*Y*)

(30) Normally (*X* leads to the conclusion that not-*Y*)

(31) Normally (*X* causes the speaker not to SA that *Y*)

While I wouldn't want to go along with either Sweetser's postulation of these three domains or her 'analysis' (if it can be called that) of *although*, she points out some interesting examples of *although* utterances. Any adequate analysis of the meaning of *although* should explain not just the interpretation of standard examples involving *although*, such as (1), but also that of its 'epistemic' and 'speech act' uses. In what follows, I'll briefly look at some analyses of *although* before I propose my own, relevance-theoretic account.

6.3 Traditional ways of accounting for the meaning of *although*

6.3.1 Winter & Rimon, Sidiropoulou

Like König (1985), Winter & Rimon (1994) don't actually propose a detailed analysis of the meaning of *although*. Instead, they are concerned with giving a semantics for what they call "contrastive conjunctions", of which *although* is one. Nevertheless, their approach seems worth discussing, at least briefly, simply because

they are among the few theorists who mention *although* at all and they have a view on the difference between (denial) *but* and *although*.

According to Winter & Rimon (1994: 369), *although* can only express what they call restricted contrast (which is the same as König's 'concessivity'), i.e. *although* can only link *P* and *Q* if *P* implies *not-Q*. *But*, on the other hand expresses general contrast, which they capture in terms close to A & D's (1977) account of denial *but*, i.e. *P* implies *not-R*, *Q* implies *R*. This means that they would regard (13) as unacceptable (unless it was interpreted as implying that the rain should stop the speaker from wanting fresh air). However, they admit that some native speakers find (32) acceptable when, for example, uttered by the doctor who operated on the son to the father who is concerned that the operation wasn't successful.

(13) a. I need some fresh air although it's raining.
b. Although it's raining, I need some fresh air.

(32) Your son walks although he walks slowly.

In such a case *P* (*your son walks slowly*) would imply *not-R* (*the operation wasn't a success*) and *Q* (*your son walks*) would imply *R* (*the operation was a success*). I believe that Winter & Rimon may find *although* unacceptable in cases where *Q* doesn't directly deny an implication of *P* because they only consider cases of the form *Q although P*. As with the example above, I find (32) much more acceptable in the guise of (33).

(33) Although your son walks slowly, he walks.

It will be seen in 6.5 that this difference can be explained in terms of the order in which the clauses are processed.

Sidiropoulou's (1992) account is set in a different framework from Winter & Rimon's (1994) and she believes that *although* has basically two interpretations. According to her (1992: 204-206), *Although P, Q* can be given either a "Shared Implicature Concession (SIC)" reading or a "Speaker's Attitude Concession (SAC)" reading. SIC simply amounts to the same as König's 'concessive' reading, Winter & Rimon's 'restricted contrast' and what I've called 'direct denial of expectation'.

SAC, on the other hand, is a variety of König's 'adversative' reading, Winter & Rimon's non-restricted contrast and my own indirect denial. According to Sidiropoulou (1992: 206), SAC involves the

> *signaling of a change in the speaker's attitude* with respect to what follows, or precedes, the *although* conjunct. (Sidiropoulou's italics)

She, therefore, analyses *although* as indicating in these cases that the speaker either has a positive attitude to *P* and a negative attitude to *Q* or the other way round. For instance, she might analyse Winter & Rimon's example in (33) as conveying that the speaker has a negative attitude to *P* (*your son walks slowly*) and a positive attitude to *Q* (*your son walks*). Now, while this might be plausible for this particular example, I find it difficult to see how (13) could be analysed along similar lines. It seems likely that in this case the speaker will have a negative attitude towards *P* (*it's raining*), but it's not clear that saying that the speaker has a positive attitude towards *Q* (*I need some fresh air*) either does justice to the situation or is particularly enlightening. Furthermore, this example clearly shouldn't get a SIC reading either (there is no implication that the speaker doesn't normally need fresh air when it's raining).

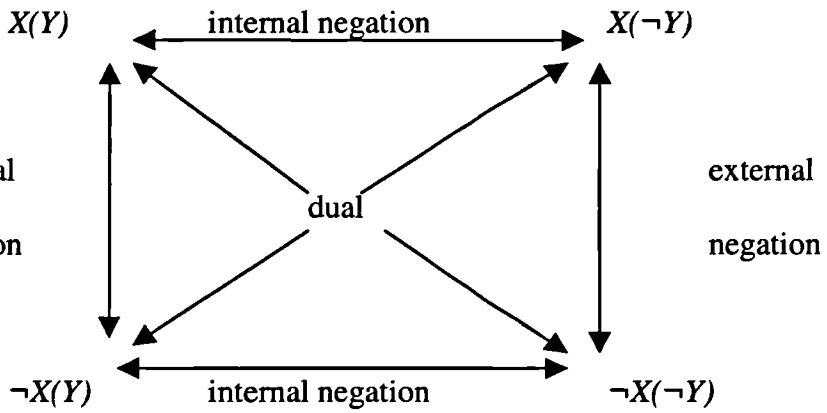
The upshot of this very brief discussion of Winter & Rimon (1994) and Sidiropoulou (1992) is that, apart from a proliferation of terminology, there is a stunning lack of variety when it comes to analyses of the meaning of *although*. The only point on which there seems to be some disagreement is whether or not *although* can link *P* and *Q* in cases in which the contrast or incompatibility between them is not direct. Whether a theorist believes that it can or can't seems to be entirely dependent on whether the examples they consider are of the form *Q although P* or *although P, Q*. Winter & Rimon predominantly consider the former and conclude that *although* must express direct (or restricted) contrast, Sidiropoulou exclusively considers the latter and concludes that *although* can express either direct or indirect contrast. However, essentially, they all agree with König's (1985) analysis of *Q although P*/*Although P, Q*, although, of course, their accounts differ in some of the detail. None of them give a particularly satisfying account of what exactly it is that *although* encodes.

6.3.2 A duality account

While the 'account' of *although* given by König (1986) doesn't go beyond stating that *Although P, Q* is the prototypical concessive construction, König (1989) takes a slightly more interesting approach. In this paper, he proposes that concessive relations are the **dual** of causal relations. Clearly, this needs some (in fact, quite a lot of) explanation. König (1989: 197) follows Löbner (1987, 1990) in defining the semantic (i.e. truth-conditional) relation of duality as follows.

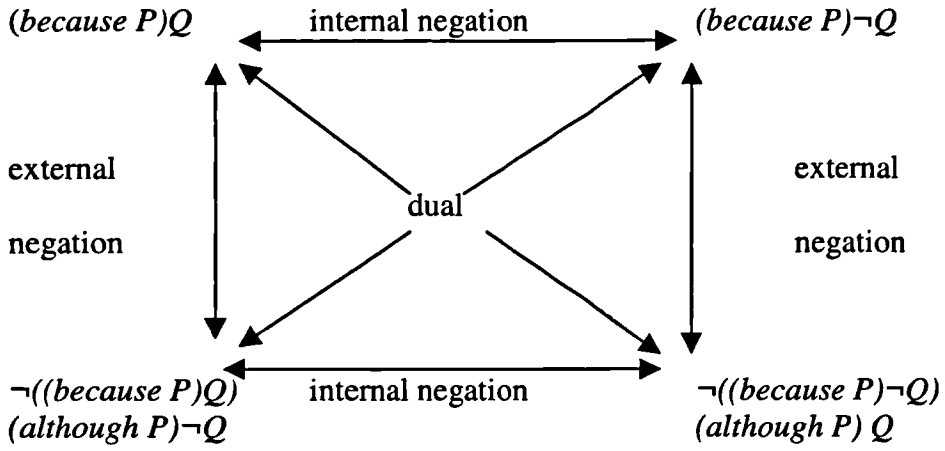
Duality is a relation that can hold between two propositions whenever there are two possibilities for negating the proposition, internal and external. For instance, negation can apply to *all Fs are G* either externally, as in *not(all Fs are G)*, or internally, as in *all Fs are not-G*. More generally, there are three ways of combining negation with any proposition of the form *X(Y)*: *X(¬Y)*, *¬X(Y)*, and *¬X(¬Y)*. König (1989: 197) represents these possibilities in the "duality square" in (34).

(34)



As this square indicates, the relation of duality holds between the positive proposition and the external negation of its internal negation. For instance, *all Fs are G* and *not(all Fs are not-G)* (= *some Fs are G*) are duals. The idea is now that the relationship between *all Fs are G* and *some Fs are G* is paralleled by that between *because P, Q* and *although P, Q*, i.e. that causal relations and 'concessive' relations are duals of each other. If this is right, then *not(because P, not-Q)* should be (at least truth-conditionally) synonymous with *although P, Q*. To illustrate this, I give the duality square for *because P, Q* in (35).

(35)



König (1989: 195-197) argues that such a close connection between causality and concessiveness is well supported by intuitions. For instance, he refers to Hermodsson (1978), who proposes to reanalyse (and rename) 'concessives' as 'incausals'. This is based on an intuition close to that of Sweetser (1990) who seems to see the relation expressed by *although* as one between obstacle or impediment (the content of the *although*-clause) and a consequence one would have expected to be impeded or prevented from coming about in the light of the truth of the *although*-clause. This means that causal utterances, such as (36), and concessive utterances, such as (37), can be formed on the basis of one and the same underlying causal connection.

(36) Peter got wet because it was raining. *Q because P*

(37) Peter didn't get wet although it was raining. *not-Q although P*

König (1989: 196) captures these similarities in (38) and (39).

(38) a. Since/because *P*, *Q*

b. *P* & *Q* (entailment)

c. if *P*, normally *Q* (presupposition)

(39) a. Although/even though *P*, *not-Q*

b. *P* & *Q* (entailment)

c. if *P*, normally *Q* (presupposition)

There certainly is something plausible about this intuition. Furthermore, if there really is a relation of duality between causal and concessive connections, this would have one particular advantage. While, as König (1989: 201) points out, merely stating that there is this relation between concessivity and causality doesn't amount to giving an account of either, it does mean that, once one has an account of causality, an account of (the truth-conditional properties of[5]) concessivity follows automatically (assuming one has an account of negation). Of course, it should also work the other way around, i.e. an account of concessivity should also yield an account of causality. However, this is not very likely – the chances of getting a grip on causality seem much better than those of getting a grip on concessivity. Moreover, starting with an analysis of *Although P, Q* and simply analysing *Because P, Q* as *not(Although P, not-Q)* isn't an option because *although* can't fall under the scope of (external descriptive) negation. (40) does most decidedly not capture (41).

(40) It is not the case that although it was raining, Peter didn't get wet.
Not(although P, not-Q)

(41) Because it was raining, Peter got wet.

In this, the *although/because* pair differs markedly from other duals. For instance, *all Fs are G* can be captured by *not (some Fs are not-G)*.

Unsurprisingly, there are a number of problems with König's attempt at accounting for the meaning of *Although P, Q* in terms of causality and duality. Possibly the most fundamental one is that, at best, this account only captures the meaning of *Although P, Q* in those cases where it receives a 'concessive' interpretation, i.e. where there is a direct incompatibility between *P* and *Q* and it (non-logically) implies *normally(if P, then not-Q)*. In other words, it doesn't apply to 'adversative' uses of *although*. In fact, it seems doubtful that such an account would even be an analysis of the meaning of *although*. At most, it seems, König's duality account offers an analysis of the concessive relation. However, I have argued in 5.1 that giving an analysis of a concessive relation is only interesting if it helps account for the meaning of certain linguistic expressions, such as *but* and *although*. The fact that neither *but* nor *although* always express a concessive relation indicates

[5] Even if concessivity and causality were duals, it's doubtful whether this account, couched in purely

that defining this relation doesn't lead to a full account of the meaning of these expressions. Moreover, Iten (1997, 1998a) gives a range of arguments to show that *Because P, Q* and *Although P, Q* don't stand in a relation of duality to each other, even assuming that *although* is being used 'concessively'. Here, I will just reiterate the strongest argument.

This argument against König's duality account of concessives is connected with the truth conditions of *because P, Q* and *although P, Q*. It is generally accepted that, while the truth of *P* and the truth of *Q* are necessary conditions for the truth of *Because P, Q*, they are not sufficient. For an utterance such as (22) to be true it is not enough that it was raining and that Peter got wet, but the rain must have been the cause of Peter's getting wet.

(22) Peter got wet because it was raining.

This is shown nicely by (42), where the (descriptive) negation applies just to the causal connection between the rain and Peter's getting wet.

(42) Peter didn't get wet because it was raining – it was raining, but he got wet because he fell in the pond.

The 'concessive' relation between the rain and Peter's not getting wet expressed by *although* in (37), on the other hand, is not a matter of truth conditions[6]. As mentioned in 6.1, all it takes for an utterance like this to be true is the truth of each conjunct.

(37) Peter didn't get wet although it was raining. *not-Q although P*

The unacceptable (43) shows that it is impossible to negate (descriptively) just the concessive relation.

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logical terms, would shed any light on the relation's cognitive import.

[6] Recall, however, that Bach (1999) would see *although* as contributing to what is said, at least on some of its uses, because it passes his IQ test. For instance, an indirect quotation along the lines of *John said that Peter went out although it was raining* is perfectly acceptable.

(43) *Peter didn't not get wet although it was raining – it was raining, but Peter didn't get wet although he fell in the pond.

This difference raises some interesting points for König's duality account. For instance, *not(because P, Q)* and *although P, ¬Q* should be equivalent according to the duality square in (35). However, it is not immediately clear that they are. *Although P, ¬Q* is true just in case *P* is true and *¬Q* is true. In other words, the truth of *P* and the truth of *¬Q* are necessary and jointly sufficient conditions for the truth of *although P,¬Q*. It is not obvious that the same conditions are necessary and jointly sufficient for the truth of *not(because P, Q)*. Of course, they are jointly sufficient for the truth of *not(because P, Q)*. However, they are not necessary. The truth of *P* and *¬Q* is only one of four sets of propositions that are sufficient for the truth of *not(because P, Q)*. All four possibilities are given formally in (44).

(44) a. *P, ¬Q* [and, therefore, *¬(P* causes *Q)*]
b. *¬P, Q* [and, therefore, *¬(P* causes *Q)*]
c. *¬P, ¬Q* [and, therefore, *¬(P* causes *Q)*]
d. *P, Q, ¬(P* causes *Q)*

To give a concrete example, assuming that the negation is understood as taking wide scope, (45) could be true due to any of (46a)-(d).

(45) Peter didn't get wet because it was raining.

(46) a. It was raining, but Peter didn't get wet (and, therefore, the rain didn't cause Peter to get wet).
b. It wasn't raining, but Peter got wet (the rain didn't cause Peter to get wet).
c. It wasn't raining and Peter didn't get wet (and, therefore, the rain didn't cause Peter to get wet)
d. It was raining and Peter got wet, but it wasn't the rain that caused Peter to get wet.

In other words, for *not(because P, Q)* to mean the same as *although P, not-Q*, it has to receive a very specific interpretation. Since this interpretation is one out of four

possible ones, i.e. one out of four interpretations compatible with the semantics of *not(because P, Q)*, it follows that *not(because P, Q)* and *although P, not-Q* are only going to receive the same interpretation in certain circumstances. This means that their equivalence (if equivalent is what they are) is not a matter of their semantics but it arises pragmatically. Therefore, König's conclusion that *because* and *although* are semantically duals of each other is misguided. Nevertheless, there is something interesting to be explained here, i.e. the fact that, at least sometimes, *not(because P, Q)* and *although P, not-Q* really do seem to receive the same or a very similar interpretation. For instance, König's (1989: 196) examples (47) and (48) are likely to be interpreted along similar lines.

(47) This house is no less comfortable because it dispenses with air-conditioning.
(48) This house is no less comfortable although it dispenses with air-conditioning.

I believe (and will show) that this can be explained straightforwardly once one has an adequate analysis of the encoded meaning of *although*.

Summing up, it has been shown that König's claim that *because P, Q* and *although P, Q* are duals of each other, i.e. that *not(because P, not-Q)* and *although P, Q* are truth-conditionally equivalent, is not tenable. Furthermore, even if it could be shown that a relation of duality holds between causality and concessivity, this truth-conditional account would be missing crucial cognitive differences. For, cognitively, *because P, Q* and *not(although P, not-Q)* are certainly not equivalent.

6.4 Towards an RT account

6.4.1 Concept or procedure?

Given that *although* essentially only seems to have a single function (i.e. something to do with direct or indirect denial) there might be an initial temptation to try and treat it as encoding conceptual information. However, since it never contributes to the truth conditions of utterances in which it occurs, it seems unlikely that this is the case. In this section, I will use the three tests identified in 4.3.3 to argue that all available evidence points in the direction of *although* encoding procedural information.

Let me start with cognition. It seems quite clear that most native speakers of English would find it more than averagely difficult to say what *although* 'means'. Even linguists who spent a lot of time thinking about *although* generally end up saying how it is **used** rather than what it **means**. Furthermore, *although* is probably not one of the easiest words for foreign learners of English to acquire.

The second argument involves truth-evaluability. Recall that expressions which encode concepts are truth-evaluable whether or not they contribute to the truth conditions of a particular utterance. For instance, although *sadly* doesn't contribute to the truth conditions of A's utterance in (49), B's reply to it is perfectly acceptable.

(49) A: Sadly, my mother-in-law died.
B: That's not true, you're not sad about her death.

By contrast, the unacceptability of B's reply in (50) shows that the contribution *although* makes to the meaning of an utterance is not truth-evaluable and its meaning, therefore, not likely to be conceptual.

(50) A: Peter went out although it was raining.
B: *That's not true, he always goes out in the rain.

The final test concerns compositionality: While conceptual expressions freely combine with each other to form larger conceptual representations, procedural expressions don't combine with each other to form larger procedures and they can't be modified by other procedures or by concepts. For *although* this is brought out by examples, such as (51) and (52). These show that, while other subordinating conjunctions, such as *because*, can be modified by an adverbial like *mainly*, a combination of *mainly* with *although* has ungrammatical results.

(51) Peter went to the party mainly because he wanted to see Susan.
(52) *Susan went to the party mainly although she didn't want to see Peter.

Similarly, in (53) *partly* modifies *because* with a perfectly acceptable result, while in (54) the same can't be said of an attempt to use *partly* to modify *although*.

(53) Peter went to the party partly because he wanted to see Susan and partly because he had nothing better to do.

(54) *Susan went to the party partly although she didn't want to see Peter and partly although she had a lot of work to do.

Furthermore, (55) shows that one can use descriptive negation to negate just the meaning of *because*, while (56) demonstrates that descriptive negation can't be applied just to the meaning *although*. Obviously, where the negation is clearly metalinguistic (or echoic), *although* can be negated, as in (57)[7].

(55) Peter didn't go to the party because he wanted to see Susan but because he had nothing better to do.

(56) *Susan didn't go to the party although she didn't want to see Peter but although she had a lot of work to do.

(57) Susan didn't go to the party *although* she had a lot of work to do, but *because* of it.

Clearly, there is no syntactic reason for these differences in acceptability between (51) and (52), (53) and (54), and (55) and (56): *because* and *although* are both subordinating conjunctions. It seems, therefore, likely that this difference is due to the fact that the two conjunctions encode different types of meaning.

To sum up this section, all the available evidence points in the direction of *although* encoding a procedure rather than a concept. In section 6.4.3, I shall suggest a procedure which is likely to be what *although* encodes and this procedure will be tested on the data discussed earlier. Before that, however, something ought to be said about the explicit content of utterances of the form *Q although P* and *although P, Q*.

6.4.2 The proposition(s) expressed

As mentioned in 6.1, the general consensus is that utterances of sentences of the forms in (58) and (59) are true just in case *P* is true and *Q* is true. The question is

whether this amounts to the claim that these utterances express the conjunctive proposition in (60).

(58) *Q* although *P*

(59) Although *P*, *Q*

(60) *P* & *Q*

Obviously, if the proposition expressed were intended to capture nothing more than pure truth-conditional content, then this question would be pointless. However, recall that the proposition expressed, within the framework of Relevance Theory, is a development of a logical form encoded by the utterance and that syntactic structure is a crucial part of what is encoded. In other words, the question is whether the logical form encoded by (58) and (59) is an *and*-conjunction. As demonstrated in section 6.1, these sentences involve subordination while *and*-conjunctions, such as (60), have co-ordinate structure. It, therefore, seems highly doubtful that anything of the form in (60) could correspond to a logical form encoded by any utterance involving subordination. So, if the logical form encoded by (58) and (59) doesn't involve a co-ordinate conjunction, what is its structure? I can imagine two possibilities. First, one might want to find some way of representing subordination, say by using the symbol "sub". In this case, the logical form encoded by (58) and (59) would be (61), where *Q'* stands for the conceptually encoded content of the main clause and *P'* for that of the subordinate clause.

(61) *Q'* sub *P'*

For instance, for (1) the logical form might roughly look something like (62).

(1) a. Peter went out although it was raining.

(62) X WENT OUT sub IT WAS RAINING[8]

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[7] For a discussion of metalinguistic negation see Horn (1985). For a Relevance Theoretic reanalysis see Carston (1996b).

[8] I'm working on the assumption that proper names, such as *Peter*, don't **encode** individual concepts, but rather procedurally guide the hearer to supply such a concept on particular occasions of utterance.

Alternatively, one might want to say that (58) and (59) don't encode a single logical form at all, but, instead, that they encode the set of logical forms in (63).

(63) a. *Q'*
b. *P'*

On the face of it, (63) has the advantage over (61). First, it allows one to account relatively straightforwardly for examples that involve Sweetser's speech-act use of *although*, such as (27).

(27) Is it raining, although I'll have to go out anyway.

It seems clear that someone uttering (27) will, probably among others, be likely to communicate the higher-level explicatures in (64).

(64) a. The speaker is asking whether it's raining.
b. The speaker is saying that she'll have to go out anyway.

Now, recall that higher-level explicatures are nothing other than embeddings of the proposition expressed under speech-act or propositional attitude descriptions. Clearly, (64a) and (b) are embeddings of something under speech-act descriptions, and, according to the RT definition, the something they embed must be the proposition(s) expressed by the utterance. The proposition(s) expressed, in turn must be a development of a logical form encoded by the utterance. If one assumes that *although* utterances encode two logical forms, it is easy to see how each of them can be developed into a proposition expressed and how each proposition expressed can be embedded to form its own set of higher-level explicatures, e.g. those in (64a) and (b). If, on the other hand, the assumption is that such utterances encode one single logical form comprising the conceptually encoded content of both its clauses, it is not at all clear how this could be 'developed' into two separate propositions, each of which is a development of only one of the clauses. Now, because there is something maybe a bit marked and unusual about speech-act uses of *although* one might be tempted to look for an alternative explanation and not take this very seriously as

evidence for *although* utterances encoding two logical forms. However, this would be a mistake.

Even perfectly 'ordinary' *although* utterances, such as (1), present a problem for the assumption that they encode one single logical form. It seems uncontentious that a speaker uttering (1) is communicating each of (65a) and (b) in its own right and that she is, surely, doing so explicitly.

(65) a. Peter went out.
b. It was raining.

In other words, it is not just in speech-act uses of *although* that each clause must come with its own set of explicatures. It seems, then, that (63) should be preferred to (61), i.e. that *although* utterances should be seen as encoding two separate logical forms and as having two separate sets of explicatures.

However, (63) also has a disadvantage, i.e. it makes it look as though the two propositions, *P* and *Q* are completely unrelated syntactically. Quite obviously, that is not the case. This is brought out particularly clearly by examples of the form *although P, Q*, where the first clause may contain indexicals that are bound by constituents of the second clause. For instance, *he* and *it* in the first clause of (66) are bound by *Peter* and *the spinach* in the second.

(66) Although he_i didn't like it_j, $Peter_i$ ate [the spinach]$_j$

(67b) shows that it's not easily possible for pronouns in the first of two juxtaposed sentences to be bound by constituents of the second sentence[9].

(67) a. $Peter_i$ ate [the spinach]$_j$. He_i didn't like it_j.
b. He_i ate it_j. $Peter_{*i/k}$ didn't like [the spinach]$_{*j/l}$.

[9] I've changed the order of the two sentences for the juxtaposed examples so as to rule out pragmatic unacceptablility – *Peter didn't like the spinach. He ate it.* doesn't make for a particularly acceptable piece of discourse.

These syntactic properties of utterances like (66) can be captured by (61) but not by (63). It seems, then, that neither of the two alternatives to (60) is quite ideal. So, what is one to do?

It is not clear to me how the claim that *Q although P* and *although P, Q* encode two logical forms could be adapted to capture the syntactic properties of these sentences. However, Carston (forthcoming b) offers a way of reconciling the idea that these sentences encode a single logical form, maybe along the lines of (61), with the fact that the main clause and the subordinate clause can each have their own set of explicatures. In section 3.3.1, she considers examples such as (1) and proposes a modification of the relevance-theoretic definition of explicature to account for the undoubted intuition that, for instance, an utterance of (1) has the explicatures in (65). Her new definition of explicature is given in (68).

(68) An assumption (proposition) communicated by an utterance is an 'explicature' of the utterance if and only if it is a development of (a) a linguistically encoded logical form of the utterance, or of (b) a sentential subpart of a logical form.

This definition makes it possible not only to explain how (65a) and (b) can both be explicatures of (1), but also how (27) can have the higher-level explicatures in (64a) and (b).

(27) Is it raining, although I'll have to go out anyway.

(64) a. The speaker is asking whether it's raining.

b. The speaker is saying that she'll have to go out anyway.

In both of these cases, the explicatures in question aren't developments of a logical form encoded by the utterance but developments of a sentential subpart of a logical form encoded by the utterance. This raises the question of whether, in the case of *although*-conjunction, the whole logical form ever is developed to form an explicature. That is, do utterances of the form in (58) and (59) ever express a proposition that is a development of the entire logical form. This is an interesting question because it seems that in the case of other subordinating conjunctions, such as *because* and *when*, this does happen. For instance, according to Carston

(forthcoming b, section 3.3.1), *because* utterances, e.g. (22), standardly express three propositions, e.g. (69a)-(c)[10].

(22) Peter got wet because it was raining.

(69) a. PETER GOT WET

b. IT WAS RAINING

c. PETER GOT WET BECAUSE IT WAS RAINING

Similarly, an utterance containing *when*, such as (70), could, and should, be seen as communicating the three propositions in (71)[11].

(70) It was raining when Peter went out.

(71) a. IT WAS RAINING

b. PETER WENT OUT

c. IT WAS RAINING WHEN PETER WENT OUT

It seems clear that, in both these cases, the (c) proposition must be communicated because both *because* and *when* actually contribute to the truth conditions of the utterances in which they occur. However, if truth-conditionality is the criterion, then one would expect there not to be a (c) proposition for *although* utterances. Indeed, it is hard to see, as I have shown in the previous sub-section, what conceptual constituent *although* could contribute to such a proposition. Although there isn't anything inherently wrong with the idea that *although* utterances encode a single logical form, but never communicate a proposition that is a development of the whole of this logical form, there is something slightly strange about it. I believe that there may be a way of avoiding this 'strangeness'.

It might be that utterances of the forms in (58) and (59) don't only express propositions that are developments of sentential subparts of the logical forms they encode but that they also express a propositions developed from the entire logical forms. For instance, it doesn't seem entirely wrong to suggest that (1) also expresses the proposition in (72).

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[10] In the Gricean spirit, I'm hideously oversimplifying these propositions.

(72) PETER WENT OUT WHILE IT WAS RAINING

Indeed, the embedding test suggests that it is a proposition along these lines that determines the truth conditions of an utterance of (1a). Surely, a speaker uttering (5) isn't conveying that the reason Peter got wet is that he went out **and** that it was raining, but, crucially, that Peter went out **while** it was raining

(5) Because Peter went out although it was raining, he got wet.

Now, one might want to take this to mean that *although* actually encodes *while* plus something else. However, this is clearly not tenable. For instance, rather than expressing a proposition that contains *while*, it seems likely that an utterance of (73) would express one like (74), which contains *before*.

(73) Peter got drunk although he had to give a lecture.
(74) PETER GOT DRUNK BEFORE PETER HAD TO GIVE A LECTURE

Similarly, (75) seems likely to express a proposition containing *after*, along the lines in (76).

(75) Peter went out although Mary told him not to.
(76) PETER WENT OUT AFTER MARY TOLD PETER NOT TO GO OUT

In other words, it's unlikely that *although* encodes anything like 'conceptual subordinating conjunction plus something else' – the evidence presented in the last section speaks against that quite strongly already. Instead, it is possible that its syntactic function as a subordinating conjunction makes available a slot in the logical form which is then pragmatically filled by a subordinating concept. Which concept this will be is determined by the context, but also, indirectly, by the procedure encoded by *although*, which, at the very least, must rule out *because*.

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[11] See fn. 10.

6.4.3 What procedure?

Since *although* seems to be able to replace *but* in all examples in which the second clause denies an 'expectation' created by the first, one might want to try and formulate a procedure for *although* along the lines of denial. However, this doesn't seem to be an option. First, assuming that (1) and (2) both do involve denial of expectation, *but* in (2) introduces the clause that does the denying, while *although* in (1a) and (b) introduces the clause whose implication is being denied.

(2)		It was raining but Peter went out.	*P but Q*
(1)	a.	Peter went out although it was raining.	*Q although P*
	b.	Although it was raining, Peter went out.	*Although P, Q*

This means that *although* couldn't possibly encode a procedure that instructs the hearer that the clause it introduces contradicts and eliminates an assumption. Nevertheless, the *although* clause does seem to be doing some contradicting. For instance, in (1) it could be seen as indirectly contradicting the assumption that Peter went out. However, it clearly doesn't eliminate this assumption. It was observations like these that led me to propose the procedure in (77) in Iten (1998b: 100)

(77) What follows (i.e. *P*) contradicts, but does not eliminate, *X*. *X* is an aspect of the interpretation of *Q*.

According to this, *although* indicates that the clause it introduces contradicts an aspect of the interpretation of *Q* without eliminating it. In the case of (1), this aspect of the interpretation of *Q* is the proposition expressed. However, in other examples it could be a higher-level explicature or an implicature. The former takes care of Sweetser's speech-act examples, while the latter explains König's 'adversative' examples, where in the corresponding *but* utterance the denial of expectation would be indirect. For instance, the idea is that in (27) what is contradicted without being eliminated is the higher-level explicature in (78).

(27) Is it raining, although I'll have to go out anyway.

(78) The speaker is asking whether it is raining.

Similarly, in (13) the *although* clause contradicts the implicature in (76) without eliminating it.

(13) a. I need some fresh air although it's raining.
b. Although it's raining, I need some fresh air.

(79) The speaker wants to go for a walk.

Iten (1998b: 100-105) shows in detail how the procedure in (77) combined with the communicative principle of relevance can explain the whole range of examples discussed by König and Sweetser.

However, while it may be doing a reasonable job of accounting for the examples, this procedure has some weak points. For instance, it overlooks the fact that the contradiction between *P* and *X* is never of a direct nature, i.e. it is never the case that *X* = *not-P*. Instead, it is always the case that *P* one way or another **implies** *not-X*. Indeed, Iten (1998b: 100) captures this by saying that the hearer is likely to recover a contextual assumption (which is an implicated premise) along the lines of (80).

(80) In general, ¬*X* follows from *P*.

Another undesirable aspect of (77) is that it is quite cumbersome. Now, while this certainly isn't a knockdown argument against it, it would be nice to find a more elegant procedure. Finally, it is no longer clear to me that what goes on in an *although* utterance is really a matter of the *although* clause contradicting an aspect of the interpretation of the main clause. After all, the implication of the *although* clause that contradicts an aspect of the interpretation of *Q* does not eliminate the contradicted assumption, and it is this assumption, rather than the implication of *P*, that ends up being communicated. It seems, therefore, that the procedure in (77) invites the hearer to derive an assumption, i.e. *not-X* only to eliminate it subsequently. In fact, in cases where the *although* clause follows the main clause, the hearer would have to derive an assumption the negation of which he has already processed. What really seems to go on in these utterances is that *although* prevents

an inference from going through that would end up contradicting an aspect of the interpretation of the main clause. I would therefore like to suggest that *although*, in utterances of the form *Q although P/although P, Q*, encodes a procedure along the lines in (81).

(81) Suspend an inference from what follows (*P*) which results in an unresolvable contradiction.

Understood like this, *although* functions rather like a road sign warning of a cul-de-sac, i.e. it warns the hearer of a possible inferential dead end. Its doing so has the side effect of making accessible that assumption which, in combination with *P*, will give rise to the contradiction. That is, the fact that the speaker indicates that the hearer is to suspend an inference means that she believes that he is in some danger of actually performing the inference because he may have a background assumption accessible that would license it. It is a side of effect of the hearer's being warned of a danger that the thing he is being warned of, in this case the inference that leads to a contradiction, becomes manifest or more manifest to him. This means that, sometimes, the assumption that leads to the contradiction only becomes manifest to the hearer once he has processed the *although* clause (or maybe it becomes manifest to him that the speaker thinks that the assumption is, or may be, manifest to him).

(1) a. Peter went out although it was raining.

For instance, in (1a) the hearer first processes *Q*, i.e. *Peter went out*, then *although* indicates that there is an inference from *P* (i.e. *it was raining*) that has to be suspended because it would yield a contradiction. In this particular example, it is quite conceivable that *P* (i.e. *it was raining*) gives immediate access to the assumption that people don't go out if it's raining. This assumption licenses an inference from *it was raining* to *Peter didn't go out*, which would obviously contradict the proposition expressed by *Q* (i.e. *Peter went out*). Quite generally, the most accessible assumption that could be contradicted in such examples is, of course, one that has just been communicated, i.e. explicatures or implicatures of *Q*. In the rest of this section I will show that the new procedure in (81) does at least as good a job as (77) at accounting for all manner of examples, and, indeed, it will be seen in

6.6 that it can explain when and why *although* utterances can be used to express something similar to the corresponding *but* utterances.

I have already demonstrated above that the procedure in (81) can account for what König calls 'concessive' uses of *although* and for cases where *although* operates in Sweetser's real-world or content domain. As mentioned earlier, in (6), repeated here, *although* applies to Sweetser's epistemic domain. However, it is still 'concessive', i.e., intuitively, *although* seems to indicate that *P* gives one reason to conclude *not-Q*.

(6)	a.	It was raining although Peter went out.	*Q although P*
	b.	Although Peter went out, it was raining.	*Although P, Q*

My new procedure accounts for this type of example without any problems. *Although* indicates that the hearer is to suspend an inference from *P* (*Peter went out*) to an assumption that would contradict a communicated assumption. As always, the most accessible assumption that could be contradicted is the proposition expressed by *Q* (i.e. *it was raining*). Now, the inference from *Peter went out* to *it wasn't raining* must be licensed by an accessible assumption and the only kind of assumption that can license this inference is one that involves the possibility of concluding that it isn't raining from the fact that Peter is going out – maybe because he is the kind of guy who hates the rain so much that he avoids it at all cost. The problem with this assumption is that it is less generally accessible than the assumption that people don't go out if it's raining, because it involves more idiosyncratic information about Peter. Furthermore, the fact that it is raining can be the cause of somebody's not going out, while somebody's going out is most decidedly not a possible cause of there being no rain. In other words, out of context (1) is easier to process than (6) because the assumption that licenses the suspended inference is more readily accessible in the case of (1). Of course, for people who know Peter very well and maybe often joke about his dislike of rain (6) may well be as easy to process as (1).

In the case of an utterance of (27), where *although* applies to the speech-act domain in Sweetser's view, the suspended inference is from *P* (*I'll have to go out anyway*) to the negation of a higher-level explicature of *Q* (i.e. *I'm not asking you if it's raining*).

(27) Is it raining, although I'll have to go out anyway.

This inference is licensed by assumptions such as *people who have to go outside no matter what the weather is like don't ask what the weather is like.* This shows how the procedure in (81) can explain 'concessive' uses of *although* quite easily.

'Adversative' uses of *although*, such as (13), can be explained along the following lines.

(13)	a.	I need some fresh air although it's raining.	*Q although P*
	b.	Although it's raining, I need some fresh air.	*Although P, Q*

Again, *although* indicates that the hearer is to suspend an inference from *P* (*it's raining*) to an assumption that contradicts a communicated assumption. Here, the most likely candidate for the communicated assumption that is potentially contradicted isn't the proposition expressed by *Q* (i.e. *the speaker needs some fresh air*) or a higher-level explicature (e.g. *the speaker is saying that she needs some fresh air*), but an implicature of *Q* (i.e. *the speaker wants to go for a walk*). The inference from *it's raining* to *the speaker doesn't want to go for a walk* is licensed by a relatively easily accessible and generally accepted assumption, such as *people don't normally want to go for a walk in the rain.*

I believe that this has shown that the procedure in (81), not only makes it possible to account for the whole range of examples involving *although*, but that it can also explain why, at least taken out of context, some *although* utterances are easier to process, and therefore more likely to be judged acceptable, than others.

In section 6.3.2 I promised to show later that an adequate analysis of *although* is able to explain the fact that König's examples (47) and (48) seem to receive the same interpretation. This is the point at which I should make good my promise.

(47) This house is no less comfortable because it dispenses with air-conditioning.
Not(Q because P)

(48) This house is no less comfortable although it dispenses with air-conditioning.
Not-Q although P

Let me start with (48). As above, *although* indicates that the hearer is to suspend an inference from *P*, here *this house dispenses with air-conditioning*, that leads to a contradiction. In this case, it is plausible that *not-Q*, i.e. *this house is no less comfortable*, is the assumption that would be contradicted and that an assumption along the lines of (82) licenses the suspended inference.

(82) If a house dispenses with air-conditioning, it's less comfortable.

Surely, it's conceivable that what lies behind the assumption in (82) is a belief that a house's lack of air-conditioning **causes** it to be less comfortable. Now, (47) can be paraphrased as (83).

(83) It is not the case that the fact that this house dispenses with air-conditioning causes it to be less comfortable.

In other words, someone uttering (47) is saying that, in this particular case, the house's lack of air-conditioning doesn't cause it to be less comfortable. It seems, then, that both, (47) and (48), involve the suspension of a potential move from cause to consequence, i.e. from the house's lack of air-conditioning to its being less comfortable. A speaker of (47) asserts that this move doesn't take place in the real world, while a speaker of (48) uses *although* to indicate that it is to be suspended in the hearer's mind.

6.5 *Q although P* vs. *Although P, Q*

At the beginning of this chapter I noted that, particularly when it comes to 'adversative' uses of *although*, there seems to be a difference in acceptability or ease of processing between utterances of the form in (58) and those of the form in (59).

(58) *Q* although *P*

(59) Although *P*, *Q*

In particular, I observed that there was a tendency to prefer (13b), (15b) and (19b) to their corresponding (a) utterances.

(13) a. I need some fresh air although it's raining.
b. Although it's raining, I need some fresh air.
(15) a. Bill is short although John is tall.
b. Although John is tall, Bill is short.
(19) a. He has long legs although he is a bit short of breath.
b. Although he is a bit short of breath, he has long legs.

I believe that this difference can be explained in processing terms. The procedure in (81) means that a hearer needs access to two assumptions in order to find an *although* utterance acceptable, i.e. to be able to process it smoothly along the lines indicated by *although*:

(i) the assumption that licenses the suspended inference; and
(ii) the assumption which the inference, if performed, would contradict.

This is necessary because the hearer needs to know which inference from *P* the speaker intends him to suspend. Obviously, accessing (i) involves accessing (ii) and accessing (ii) makes it easier to access (i). It is precisely in the order in which (i) and (ii) are likely to be accessed that utterances of the form in (58) are different from those of the form in (59).

In the standard 'concessive' examples, such as (1), even though (a) and (b) are processed differently, given the different order of the clauses, there is no noticeable difference in the processing effort that is required. Therefore, there is no difference in acceptability between (1a) and (1b).

(1) a. Peter went out although it was raining. *Q although P*
b. Although it was raining, Peter went out. *Although P, Q*

However, when it comes to 'adversative' examples, where the suspended inference is from *P* to the negation of an implicature of *Q*, the difference in processing paths leads to a difference in processing effort. For instance, consider (19).

(19) a. He has long legs although he is a bit short of breath. *Q although P*

b. Although he is a bit short of breath, he has long legs. *Although Q, P*

Personally, I find (19b) considerably more acceptable than (19a). In parallel to the interpretation suggested for the corresponding *but* utterance in chapter 5, I would argue that the suspended inference goes from *P* (*he is a bit short of breath*) to the negation of the implicature of *Q* given in (84). The assumption that combines with *P* to license this inference might be something like (85).

(84) He is a good runner.

(85) If X is short of breath, X is not a good runner.

An utterance of (19a) or (b) is most likely to be given this kind of interpretation in a scenario in which speaker and hearer are discussing who is a good runner or some such thing. In such a scenario, a hearer of (19b) is very likely to form the correct hypothesis as to which inference he is to suspend straightaway and he will have no problems at all in processing the utterance along the lines intended by the speaker. Hence, its undoubted acceptability.

Things are not quite as simple for a hearer of (19a), who processes *Q* first. Such a hearer is quite likely to derive the implicature in (84) in the scenario described and, therefore, should have no problems in realising which inference he is to suspend. Nevertheless, because he will just have processed the encoded meaning of *Q* (i.e. *he has long legs*), the proposition expressed by this clause will be highly accessible and he is likely to consider first the hypothesis that this is the potentially contradicted assumption. In other words, the hearer may well first access an assumption which would license the inference from *P* (*he is a bit short of breath*) to the negation of the proposition expressed by *Q*, e.g. *if X is a bit short of breath, then X doesn't have long legs.* No doubt, he will discard this assumption as soon as he's accessed it. However, his accessing it at all means that (19a) involves more processing effort than (19b).

6.6 *But* vs. *although* – revisited

In the first two sections of this chapter I discussed some of the similarities and differences between *but* and *although*. Now that I've proposed procedural analyses of both, it should be possible to explain these similarities and differences in terms of the procedures encoded by *but* and *although*. The procedure encoded by *but* is given in (86), that encoded by *although* in (81), repeated below.

(86) What follows (*Q*) denies an accessible assumption.

(81) Suspend an inference from what follows (*P*) which results in an unresolvable contradiction.

Both of these procedures can apply in cases where *P* implies *not-Q*: the *but* procedure applies because in such a case *Q* denies *not-Q*; the *although* procedure because the inference from *P* to *not-Q* has to be suspended in order to avoid a contradiction. Similarly, in cases where *P* implies *not-R* and *Q* implies *R* both procedures can apply: the *but* procedure because *Q* indirectly denies *not-R*, which is accessible from *P*; the *although* procedure because the inference from *P* to *not-R* must be suspended to avoid a contradiction between *not-R* and *R*.

These two procedures can also explain why *but* can give rise to many more 'interpretations' than *although*. The procedure *but* encodes is much simpler and more general than that encoded by *although*. In particular, it is now possible to explain why *although* can't occur discourse-initially. One possible reason for this is explored by Rouchota (1998b: 47), who stresses that subordinate clauses quite generally have to be embedded in main clauses and, therefore, can't occur in isolation. No doubt, this observation is correct. However, the *although* procedure suggested in this chapter also rules this out, at least for discourse-initial isolated *although* clauses. Recall that *although* indicates that an inference from the clause it introduces has to be suspended because it results in an unresolvable contradiction. Such a contradiction can only arise where at least one other assumption is being communicated by the same speaker. This also explains why utterance-initial occurrences of isolated *although* clauses, such as Mary's utterance in (21), are only acceptable when uttered with an interrogative intonation.

(21) Peter: I think John is wonderful.
Mary: *Although he cheated on you./Although he cheated on you?

As before, *although* indicates that the hearer is to suspend an inference from *he cheated on you* because it leads to an unresolvable contradiction. The contradiction is clearly between the proposition expressed by Peter's utterance and an implication one would derive from *John cheated on Peter* and *the cheated party doesn't usually think the cheating party is wonderful.* However, Mary isn't the one who communicated the assumption that Peter thinks John is wonderful. So, there strictly speaking isn't an unresolvable contradiction and it isn't actually up to Mary to indicate that the inference should be suspended. All she can do, and what I believe she does do by uttering the *although* clause as a question, is tentatively attribute the suspension of this inference to Peter and hope that her pointing out that there is an inference that has to be suspended in this way if one is to believe both that Peter thinks John is wonderful and that John cheated on Peter. If Mary wanted to object to Peter's thinking that John is wonderful more forcefully, she should have uttered (87), where what she is denying might well be the assumption that it's okay for Peter to think John is wonderful or, indeed, the clearly accessible assumption that John is wonderful.

(87) But he cheated on you!

The final set of examples I want to consider come from R. Lakoff (1971: 137). She correctly observes that an utterance of (88) is perfectly acceptable, while neither (89a) nor (b) can be uttered felicitously.

(88) John would be a doctor today, but he failed chemistry.

(89) a. *Although John would be a doctor today, he failed chemistry.
b. *John failed chemistry although he would be a doctor today.

R. Lakoff doesn't give an explanation of these differences but simply states that the use of *but* involved doesn't seem to be either straightforward denial of expectation or 'semantic opposition'. I would argue that what's going on here is that the *but* clause

in (88) denies the accessible, but clearly not manifest, assumption *John is a doctor today*. The *although* examples are unacceptable because, to parallel the *but* utterance, the suspended inference would have to go from *P* (i.e. *John would be a doctor today*) to the negation of a communicated assumption – most probably (and accessibly) the proposition expressed by *Q* (i.e. *John failed chemistry*). However, the only accessible assumption that could license this inference is the completely implausible (90).

(90) If someone would be a doctor today they didn't fail chemistry.

In this chapter I hope to have shown that a procedural account of the meaning of *although*, on which it is seen as indicating that an inference has to be suspended because it results in an unresolvable contradiction, is not only descriptively adequate but also goes a long way towards explaining which *although* utterances are judged acceptable and, in particular, when an *although* utterance can be used to achieve an interpretation similar to a corresponding *but* utterance, and when it cannot.

CHAPTER 7:
CONCESSIVE CONDITIONALS: THE CASE OF *EVEN IF*

7.1 *Even* and *even if*

At the beginning of chapter 5 it was observed that, given the right context, an *even if* utterance, such as (1a) or (b), can receive an interpretation similar to that of the *but* utterance in (2) or the *although* utterances in (3a) and (b).

(1) a. Even if it's raining, Peter will go out.
b. Peter will go out, even if it's raining.

(2) It was raining but Peter went out.

(3) a. Although it was raining, Peter went out.
b. Peter went out although it was raining.

König (e.g. 1986) refers to such *even if* conditionals as **concessive** (or "irrelevance") **conditionals**. According to him (1986: 234), concessive conditionals of the form *Q, even if P* or *even if P, Q*[1] entail *Q* and conventionally imply *if P, then normally not-Q*. At a first glance, this seems roughly right. An utterance of (1a) does indeed seem to communicate that Peter will go out and that Peter wouldn't normally go out in the rain. Similarly, if Mary says (4) to Peter, he will, no doubt, take her to communicate that she won't marry him[2].

(4) Even if you were the last man on earth, I wouldn't marry you.

In this, there is a marked difference between *even if*-conditionals and 'ordinary' conditionals, such as (5a) or (b).

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[1] There doesn't seem to be any difference in meaning between conditionals of the form *Q, even if P* and those of the form *even if P, Q*, and I'm using the two interchangeably.
[2] I find it slightly more doubtful that Mary would also be conventionally implicating that if he were the last man on earth she would normally marry him, or that a woman would normally marry the last man on earth.

(5) a. If it's raining, Peter will go out.

b. Peter will go out if it's raining.

Quite clearly, someone uttering (5a) or (b) will not be taken to communicate either that Peter will go out or that, if it's raining, Peter normally wouldn't go out. On the contrary, a speaker might well utter either of the above on the basis of her assumption that Peter normally goes out in the rain.

In König's view concessive conditionals share some properties with both concessives and conditionals. Recall, that, according to him, concessives of the form *P but Q* or *although P, Q*/*Q although P* entail both *P* and *Q* and conventionally implicate *if P, then normally not-Q*. Conditionals of the form *if P, then Q*, on the other hand, entail neither *P* nor *Q*. In other words, concessive conditionals are similar to concessives in that they entail *Q* and in that they carry the same conventional implicature, while they are similar to ordinary conditionals in that they don't entail *P*.

If König's observations are right, and *even if*-conditionals do indeed **entail** their consequents, then the presence of *even* makes a difference to the truth conditions of the utterance. For instance, an utterance of (1a) or (b) would be true just in case Peter will go out. An utterance of (5a) or (b), on the other hand, is true just in case Peter will go out if it's raining. In other words, *even if P, Q* isn't truth-conditionally equivalent to *if P, then Q*. This means that there is a marked difference between *but* and *although*, on the one hand, and *even if*, on the other: As mentioned in the previous two chapters, neither *but* nor *although* makes a difference to the truth conditions of the utterances in which it occurs. That is, (2) and (3a, b) will both be true just in case Peter went out and it was raining.

Intuitively it isn't clear that König is right about the truth conditions of *even if P, Q*. It seems at least strange that there should be such a lot of linguistic material, i.e. the whole antecedent (including *even* and *if*), that doesn't make a contribution to the truth-conditional content of the utterance[3]. For the moment, I'm leaving the question of whether or not *even* makes a difference to the truth conditions of the

[3] This only holds if König's claim is that *Q* is **all** that is entailed by *even if P, Q*. It isn't entirely clear if this is, indeed, what König believes. It seems at least interesting (and somewhat strange) that König's (1986: 234) list of entailments of *if P, Q* is empty.

utterances in which it occurs. I will take it up again in 7.6.2. Even if *even* doesn't have truth-conditional meaning, it seems clear that its addition to a conditional, in the examples looked at so far, has a fairly dramatic effect on what is communicated. So, what is this difference between *even if*-conditionals and 'bare' conditionals down to?

Possibly the simplest (and the most attractive) hypothesis is that the difference is entirely down to the meaning of *even* and how it interacts with the conditional. In other words, the meaning of an *even if*-conditional is the compositional[4] result of the meanings of its constituents, including *even* and *if*. This is the kind of approach taken by most theorists who have concerned themselves with *even if*, e.g. Bennett (1982), Lycan (1991) and Barker (1991, 1994). Of course, there are exceptions to this rule. For instance, Pollock (1976) lists (subjunctive) *even if* conditionals as a separate class of conditionals and seems to treat *even if* as an "idiomatic lump", to use Bennett's (1982: 414) expression.

The 'compositionality' hypothesis is supported by the fact that by far not all *even if*-conditionals fulfil König's criteria for concessive conditionals. There are a number of different ways in which *even* can interact with conditionals depending on the focus of *even*. For instance, compare Bennett's (1982: 410) example in (6) with my own (4).

(6) Even if he drank just a little, his boss would fire him.

(4) Even if you were the last man on earth, I wouldn't marry you.

Clearly, (6) as uttered, for instance, by Jill about John's incredibly puritanical and intolerant boss Sue, neither entails nor implies its consequent (not even weakly) – Jill will not be taken to communicate that Sue will fire John by her utterance of (6). Bennett explains this difference in implications as being a matter of the focus of *even*: According to him, in (6), the focus of *even* is *just a little*, while, in (4), it is the whole antecedent, including *if*[5]. Bennett's account of *even* and *even if* will be discussed in more detail shortly.

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[4] Note that the notion of 'compositionality' used here, is to be understood as covering more than the **conceptual** compositionality tested for in previous chapters. That is, it includes cases where one or more procedures operate on the conceptual content of an utterance.

[5] The compositionality assumption is supported by the fact that *even* and *if* don't always have to occupy adjacent positions for the utterance to receive a 'concessive conditional' interpretation. For instance, *I wouldn't marry you if you were the last man one earth, even* is likely to receive the same

Because it seems that concessive *even if*-conditionals are most likely to be the result of the compositional interaction between *even* and *if*, I will not only consider *even if* conditionals in this chapter, but I will also look at a range of accounts of the meaning of *even* and investigate how they explain its function in conditional sentences. Needless to say, the compositionality assumption means that for a complete account of the meaning of *even if*-conditionals what is needed is not just an account of the meaning of *even* but also an account of the meaning of *if*. However, providing such an account would almost certainly take up several more theses. Nevertheless, at least Lycan (1991) and Barker (1991, 1994) do give accounts of the meaning of *if* as well as *even* and I will briefly discuss these. Where my own analysis is concerned, I will assume a more or less intuitive analysis of the conditional and indicate how *even* could interact with it on this assumption. However, my own analysis is compatible with any account of the meaning of conditionals.

In what follows, I will begin by presenting a number of philosophical accounts of *even* and *even if*, starting with Bennett's (1982) account, to which all the others whose accounts will be discussed have reacted in some fashion. Before going on to look at these other accounts I will give a general overview of the issues on which most theorists agree and those on which they disagree. I will divide the accounts under consideration into two groups: 'universal' and 'existential'. Finally, I will explore the possibilities of analysis afforded by the cognitive approach of Relevance Theory before ending with a summary of chapters 5 to 7 and some observations concerning the generalisations that may be made about procedural meaning on the basis of the procedural accounts of *but*, *although* and *even* proposed in these chapters.

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interpretation as (4). In this, *even if* clearly differs from *even though*, which is far more likely to be an "idiomatic lump" – an utterance of *I won't marry you, though you're the last man on earth, even* is not acceptable and certainly wouldn't be interpreted in the same way as *I won't marry you even though you're the last man on earth.*

7.2 A starting point: Bennett's (1982) 'non-truth-conditional' account[6]

Bennett (1982) gives an account of the meaning of *even* in non-truth-conditional terms. That is, he believes that there is no truth-conditional difference between (1) and (5) or between (7) and (8).

(1) a. Even if it's raining, Peter will go out.
b. Peter will go out even if it's raining.

(5) a. If it's raining, Peter will go out.
b. Peter will go out if it's raining.

(7) Even Max tried on the trousers.

(8) Max tried on the trousers.

According to him (1982: 404-405), a sentence like that in (7) can be uttered felicitously just in case Max tried on the trousers, someone else tried on the trousers too, and it is more surprising that Max tried on the trousers than that the other person did. In order to capture these conditions slightly more formally, Bennett introduces the following terminology: Assuming that *S* is a sentence containing *even*, *S** is *S* without *even*, while the "neighbour" sentences of *S* are those that differ from *S** just in the element that is the focus of *even*[7]. For an *S* like (7), where *Max* is the focus of *even*, *S** is (8) and some possible neighbour sentences, S_j and S_k, are as follows:

S_j: Fritz tried on the trousers.

S_k: Moritz tried on the trousers.[8]

Bennett (1982: 405/6) now claims that an utterance of *S* will be felicitous if and only if *S** is true and there is a neighbour S_j such that:

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[6] Of course, there are earlier accounts of *even* than Bennett's (e.g. Horn 1969, Fauconnier 1975, Anscombre & Ducrot 1976). I have chosen Bennett's account as my starting point because the other analyses here discussed all react to it in one way or another.

[7] Somewhat confusingly, Bennett refers to this as the 'scope' of *even*.

[8] These notational conventions will be adhered to throughout the rest of this chapter.

(i) S_j is true, and mutually believed by speaker and hearer, and salient for them (e.g. it has just been authoritatively asserted);

(ii) the truth of S^* and that of S_j can naturally be seen as parts of a single more general truth;

(iii) it is more surprising that S^* is true than that S_j is true.

Leaving aside any worries about the vagueness of the requirement that the two sentences be part of the same "single more general truth", and the strictness of the requirement that both speaker and hearer must believe the relevant neighbour sentence, these conditions seem to capture intuitions about the use of *even*.

Bennett (1982: 412) makes it clear that the only condition for the **truth** of an *even* sentence is that the corresponding sentence without *even* (i.e. S^*) be true. The conditions in (i)-(iii) above are needed for a **felicitous utterance** of the sentence, but their falsity (or their not obtaining), according to him, is not enough to render the sentence false. Thus, he believes that an *even* utterance **implies** that the three conditions hold, but it doesn't **entail** it. He (1982: 412) also stresses that the nature of this implication is not the same as that of Grice's **conversational implicatures**, but rather that it is "a fact about the meaning of the word *even*" that these things are implied. In other words, to use Gricean terminology, *even* carries a **conventional implicature**.

Since Bennett believes that there is no truth-conditional difference between non-conditional S and S^* and that *even if*-conditionals are the result of a straightforward compositional combination of *even* and *if*, he also believes that there is no truth-conditional difference between *if P, Q* and *even if P, Q*. Nevertheless, he acknowledges that some *even if* utterances, such as (4), strongly imply their consequents, while maintaining that others, for instance (6), don't.

(4) Even if you were the last man on earth, I wouldn't marry you.

(6) Even if he drank just a little, his boss would fire him.

He explains the difference between such examples in terms of the focus of *even* and, consequently, a difference in neighbour sentences.

It seems reasonable to assume that in (6) *just a little* is the focus of *even* and that a reasonably likely S_j for this example would be something like *If he drank a lot*

his boss would fire him. The case of (4) is slightly more complicated. Intuitively, the focus of *even* seems to be the antecedent, i.e. *you are the last man on earth* and *If you weren't the last man on earth I wouldn't marry you*, or maybe *If I were in love with someone else I wouldn't marry you*, are possible S_js. If this were right, then an utterance of (4) would imply that (at least) one of these S_js is true and more likely than *If you were the last man on earth, I wouldn't marry you.* On its own, this doesn't explain why an utterance of (4) is understood as implying that the speaker won't marry the hearer. It will be seen later that it can explain this fact, once some extra assumptions have been added. However, Bennett (1982: 411) opts for an entirely different explanation.

He claims that, in cases like this, the whole of the antecedent, including *if* is the focus of *even* and that S_j isn't conditional at all. Instead, he maintains that S_j in the case of (4) is *I won't marry you.* The advantage of this account is that it captures the fact that one feels that an utterance of (4) strongly implies that the speaker won't marry the hearer: The truth of S_j (*I won't marry you*) is necessary for a felicitous utterance of (4). The disadvantage of this account is that it is counterintuitive. It will be discussed in greater detail in the next section and in 7.4.4.

It becomes clear why Bennett claims that in examples like (4) the whole of the antecedent **including** *if* is in the focus of *even* if one compares it with a case like (9), where, according to him, the whole antecedent **excluding** *if* is the focus of *even.*

(9) Even if his wife smoked, his boss would fire him.

Imagine (9) being uttered in the same scenario as (6), i.e. one in which John's boss is so puritanical that she not only won't tolerate any 'libertine' behaviour on the part of her employees but her intolerance extends to her employees' friends and family. Uttered in such a scenario, argues Bennett (1982: 410), (9) doesn't imply its consequent. However, it is quite clear that the focus of *even* must be the whole antecedent, i.e. *his wife smoked*, and (6) would be a possible S_j. Now, since all that is needed for a felicitous utterance of (9) is the truth of S^* (*his boss would fire him if his wife smoked*) and the truth of a conditional S_j (e.g. *if he drank just a little, his boss would fire him*), there is no reason to assume that it implies *his boss will fire him.* Thus, on Bennett's account, it is the difference in focus between (4) and (9) with its resulting difference in S_js that explains why the former implies its

consequent while the latter doesn't. It will be seen in section 7.4.4 that this explanation isn't viable.

7.3 Points of agreement and points of contention

There seems to be general agreement in the (philosophical) literature that Bennett's account captures the necessary conditions (or something approaching them) for the felicitous use of *even* (where truth conditions are understood as a subset of felicity conditions). More precisely, most theorists agree that an utterance of (7) not only implies (and actually entails) that Max tried on the trousers, but also that someone else tried on the trousers and that someone else's trying on the trousers is more (or less) x than Max's doing so. In other words, there is widespread agreement that (the use of) *even* involves existential quantification (e.g. *there is an* $x \neq$ *Max s.t. x tried on the trousers*) and scalarity (e.g. '*Max tried on the trousers* is more surprising than *Peter tried on the trousers*'). However, there are a number of points on which the different accounts diverge.

First, a number of theorists (e.g. Lycan and Barker) believe that *even* doesn't just involve existential quantification but universal. According to them, (7) doesn't just imply that **someone** other than Max tried on the trousers but that **everyone** (in a certain group) did. Second, given that *even* sentences seem to have (at least) three different implications, there is also a question as to which of these are entailments. All theorists are agreed that S^* is an entailment of S, but some theorists (e.g. Lycan) believe that the existence of a universal or existential S_j (and possibly the scalar implication that S^* is more x than the S_js) is entailed, too, and not just implied non-logically. Finally, there are differing opinions on what property x S^* possesses more of than S_j and how many S_js it is that S^* is more x than.

Bennett's account fits into this picture as follows: He proposes a non-truth-conditional 'existential' account, i.e. for him it's enough that one S_j be true and more surprising than S^*, and S^* is the only implication of S that is an entailment.

There is further disagreement when it comes to the question of how the meaning of *even* combines with the conditional. As just seen, Bennett believes that, at least in certain cases, there is only one S_j for *even if*-conditionals, i.e. the consequent. This means that his treatment of *even* in such conditionals isn't entirely

parallel to his treatment of *even* in other cases: For instance, in the case of (7), comparing the surprisingness of S^* (Max tried on the trousers) with that of S_j (e.g. *Fritz tried on the trousers*) is straightforward: Max was less likely than Fritz to try on the trousers and so Max's trying them on is more surprising than Fritz's. In (4), on the other hand, comparing the surprisingness of S^* (*If you were the last man on earth, I wouldn't marry you*) with that of S_j (i.e. *I won't marry you*) isn't very straightforward at all. It will be seen in section 7.4.4 that Lycan takes up this point. For (4) to receive the same treatment as (7), S_j should be something like *If you weren't the last man on earth, I wouldn't marry you* or *If I were in love with someone else, I wouldn't marry you.* Then, S^* would be more surprising than S_j because the likelihood of the speaker not marrying the hearer in the circumstance that the hearer is the last man on earth is smaller than that of her not marrying him in other circumstances.

In what follows, I will start by looking at accounts that treat *even* in terms of universal quantification, before considering a second 'existential' account. For all of these accounts I will ask whether they treat any of the implications apart from S^* as entailments, and how they capture the detail of *even*'s scalar nature and the interaction of *even* with the conditional.

7.4 'Universal' accounts

7.4.1 Lycan's first account

Lycan (1991) bases his analysis of the meaning of *even if*-conditionals on his account of ordinary conditionals and on an intuitively correct paraphrase of sentences of the form *Q, even if P*. According to him (1991: 125), conditionals of the form *if P, then Q* should be analysed as "in any relevant event that is a "real" possibility relative to this occasion and in which *P*, *Q*". More formally he renders this as (10).

(10) $(e \in R)\,(\mathrm{In}(e, P) \supset \mathrm{In}(e, Q))$

This means that conditionals crucially involve universal quantification. For instance, (5) would be analysed as "in any relevant event that is a "real" possibility relative to this occasion and in which it's raining, Peter will go out".

(5) a. If it's raining, Peter will go out.

b. Peter will go out if it's raining.

Lycan (1991: 126) then stresses that the meaning of *even* in *even if* is no different from its meaning anywhere else. In other words, he believes that *even if* is compositional. He would, therefore, paraphrase (1), for instance, as (11), which, in turn, he sees as roughly equivalent to (12).

(1) a. Even if it's raining, Peter will go out.

(11) Peter will go out even in events in which it's raining.

(12) Peter will go out in any event, including events in which it's raining.

A formal rendering of the example is given in (13) and a formal rendering of the general case *Q, even if P* in (14).

(13) $(e \in R)$ (In(e, *Peter will go out*) & $(f \in R)$ (In(f, *it's raining*) $\supset$ In(f, *Peter will go out*)))

(14) $(e \in R)$ (In(e, Q) & $(f \in R)$ (In(f, P) $\supset$ In(f, Q)))

(13) reads "In any event e that's a real and relevant possibility, Peter will go out, and in any event f that's a real and relevant possibility, Peter will go out if it's raining" or, slightly less complicated, "Peter will go out in any event, including any in which it's raining" (Lycan 1991: 129-30). In other words, Lycan sees *even* as a universal quantifier. As he (1991: 129) notes, his account of *even if* is a truth-conditional one, that is, unlike for Bennett, for him, the truth conditions of *Q even if P* are different from those of *Q if P*. That is, according to Lycan, (5) is true just in case Peter goes out in any event in which it's raining, while the corresponding *even if*-conditional in (1) is true just in case Peter goes out in any event, including one in which it's raining. I will consider the question whether *even* makes a difference to the truth conditions of utterances in which it occurs in 7.6.2. For the moment, there is more to be said about Lycan's account of *even* and *even if*.

It goes without saying that this analysis, as given above, is capable only of accounting for *even* in combination with *if*, and, even in those cases, it doesn't allow

for focus distinctions, i.e. while (14) may adequately capture the truth conditions of an example like (1) or (4), it decidedly won't do for an example like (6).

(4) Even if you were the last man on earth, I wouldn't marry you.
(6) Even if he drank just a little his boss would fire him.

Quite clearly, an utterance of this sentence in the scenario described above (i.e. one in which the boss is so puritanical she won't stand for any drinking at all) isn't adequately paraphrased as "His boss would fire him in any event, including one in which he drank just a little". For this reason, and in order to be able to account for the meaning of *even* in general, not just when it co-occurs with a conditional, Lycan (1991: 130) proposes the account in (15) to capture the truth conditions of any sentence containing *even*. Note that he allows for the context-dependence of *even* sentences by giving them conditional truth conditions, much like Higginbotham's (1988) for sentences containing indexicals, which were discussed in chapter 1.

(15) Where *S* is a sentence containing *even*, *C* is the constituent of *S* and of its corresponding *S** that is the focus of *even* in *S*, unsaturated dashes "---- ----" indicate the result of subtracting *even* and *C* from *S*, and *G* is a contextually determined class containing at least one member $\neq C$: *S* is true iff every member *x* of *G* including the referent of *C* is such that ----*x*----.

Lycan (1991: 130)

This means that, for instance, assuming that the focus of *even* is *Max* and that the contextually determined class is, say, a group of friends including Fritz, Moritz and Max, an utterance of (7) will be true iff everyone in the group, including Max, tried on the trousers.

(7) Even Max tried on the trousers.

In other words, the truth conditions of (7) are quite radically different from those of (16), which will be true just in case Max tried on the trousers.

(16) Max tried on the trousers.

This, again, makes it clear that, for Lycan, *even* is truth-conditional. In the light of this, it is interesting to note, however, that he doesn't see every aspect of the meaning of *even* as affecting truth conditions. He (1991: 122) points out that *S** or, more precisely, the element that is the focus of *even* must be an extreme point on some scale, which doesn't necessarily have to be one of expectedness or likelihood. For instance, for an utterance of (7) to be acceptable in a given context, Max, in this context, must be less likely than, say, Fritz and Moritz, to try on the trousers. However, Lycan (1991: 130) makes it clear that he doesn't see this scalar aspect of *even* as part of its truth-conditional meaning, but rather as being conventionally implicated or "lexically presumed".

Given the above account, it should now be possible to bring out the difference between (4) and (6). In the case of the former, the focus of *even* quite clearly is the whole antecedent (i.e. *if you were the last man on earth*), *G* will contain a number of other conditions (e.g. *if you weren't the last man on earth, if I were in love with someone else*, etc.). According to the schema in (15), an utterance of (4) will be true iff under all the conditions in *G* (which will, presumably include all real and relevant possibilities or, in terms of the account given earlier, *R*), including the one in which the hearer is the last man on earth, the speaker wouldn't marry him. This explains why (4) seems to entail or imply that the speaker won't marry the hearer (at least not under any imaginable circumstances). By contrast, the focus of *even* in (6), on the 'puritanical boss' interpretation, is *just a little*, *G* will contain other amounts (e.g. *a lot, quite a lot, a few glasses*, etc.). An utterance of (6) will be true iff the boss would fire John if he drank any of the amounts in *G*, including *just a little*. This explains why an utterance of (6), at least on the interpretation here considered, doesn't imply or entail that John will be fired.

7.4.2 Counterexamples to Lycan's first account

Lycan's analysis of *even* as it has been given so far encounters a series of apparent and real counterexamples. He (1991: 136-141) discusses four, dismisses two and modifies his account to accommodate the last two (of which he deems the second more important). I will here only briefly sum up the first counterexample and

Lycan's treatment of it, before going on to look at the final two and the modifications they lead to in some more detail.

The first potential counterexample to any theory of *even*, as discussed by Bennett (1982: 408-410), is that *even* can be used as an intensifier of comparatives. For instance, on what is probably the most natural interpretation of (17), *even* seems to lead to the implication that both Bill and John are very tall.

(17) Bill is even taller than John.

Quite clearly, such an interpretation doesn't fit Lycan's schema in (15) (nor does it fit Bennett's analysis). Lycan follows Bennett in dismissing examples of this sort because they involve an *even* that is lexically different from the *even* their analyses attempt to describe. Both theorists cite as supporting evidence the fact that in a French translation of (17) *even* would be rendered as *encore* (as in (18)), while in the examples discussed earlier, e.g. (7), *even* would be translated as *même* (e.g. as in (19)).

(18) Bill est *encore* plus grand que John.
(19) *Même* Max a essayé les pantalons.

I have argued in 5.6.3 that, appealing though it may be, this line of argument isn't compelling. It would, therefore, seem at least worth investigating whether this use of *even* in English could be accounted for without positing a lexical ambiguity. However, because this issue doesn't seem relevant to the combination of *even* with *if*, I will concentrate exclusively on the uses of *even* described earlier.

Both of the last two counterexamples Lycan considers aim at the heart of his account, i.e. at the idea that *even* **universally** quantifies over a contextually determined class. The examples in question are given in (20) and (21).

(20) I'll be polite even if you insult me, but I won't be polite if you insult my wife.
(21) Even Bluto stayed home.

It's reasonably obvious why (20) is problematic for Lycan's account of *even*. According to his schema, an utterance of the first conjunct of this sentence would be

true just in case the speaker will be polite in every relevant event, including one in which the hearer insults him, while the second conjunct will be true iff, in any event in which the hearer insults the speaker's wife, the speaker won't be polite. In other words, if Lycan's analysis is right, it seems that (20) should be contradictory, which it clearly isn't.[9]

(21) only creates a problem in a very specific context. Consider the following scenario: A large group of people are invited to a party, all of whom are quite likely to attend. Of the whole group Gonzo and Bluto are the most likely to attend. However, on the night of the party there's a flu outbreak and everyone feels pretty horrible. Gonzo is the only person who drags himself to the party. In such a scenario an utterance of (21) would be perfectly acceptable, even though not everyone in the relevant group stayed at home. The same problem is posed by my own example in (22), which is set up in such a way that the relevant group of people is most likely to be the whole family or, at least, all the relatives at the wake and therefore will include uncle Jack.

(22) Everyone came to the wake. Even Granny stayed sober. Only uncle Jack got drunk.

I believe that this example is interesting because it is also problematic for Lycan's revised analysis of *even*, which I will discuss now.

7.4.3 Lycan's revised account

As indicated above, examples such as (20) and (21) led Lycan to modify his analysis. He considers two options, but I will only discuss the one he ultimately prefers. Instead of saying that *even* means "every...including..." (e.g. "everyone including Max tried on the trousers"), Lycan (1991: 147) suggests that *even* might mean "every...plus...", where the domain of the quantifier is restricted to **expected** real

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[9] Lycan (1991: 138-140) considers a whole range of ways in which this counterexample could be disposed of. One of these, is that the domain of relevant events is adjusted from the first clause to the second. That is, that one might well assume in the first clause that the relevant events include those in which the hearer insults the speaker's wife but the second clause makes it clear that it doesn't. Because the solution to the problems posed by the next counterexample also solves those created by the present one, I'm not discussing this possibility in any more detail.

and relevant possibilities (e.g. "everyone who was expected to, plus Max, tried on the trousers").

This account can clearly deal with (20) and (21). The first clause of (20) is no longer paraphrased as "I will be polite in every relevant event, including those in which you insult me" but as "I will be polite in every relevant event in which you'd expect me to be, plus in those in which you insult me". It seems reasonable to assume that the hearer insulting the speaker's wife will not be one of the relevant events in which the speaker would be expected to be polite and, so, there is no contradiction between the two clauses. Similarly, (21) is no longer paraphrased as "Everyone in the group, including Bluto, stayed home" but as "Everyone in the group whom you would expect to stay home did, plus Bluto". This paraphrase is, of course, perfectly compatible with a scenario in which Gonzo, whom one wouldn't expect to, didn't stay home.

I've just shown that Lycan's revised account can deal with some of the examples his initial account can't explain. However, his initial account had the advantage of explaining straightforwardly why *Q even if P* seems to entail *Q* and he (1991: 147) admits that his new "plus" theory of *even* predicts that *Q even if P* does not **entail** *Q*. On the new account, *Q even if P* is rendered as "*Q* in any expected event plus in the event that *P*". Now, quite obviously, the set of expected events will not necessarily contain any actual events so that the truth of *Q* is not guaranteed by that of *Q even if P*. Lycan (1991: 148) resigns himself to this consequence and says that "it is no longer clear that the entailment holds in real life", because examples along the lines of (20) can be found for every single utterance containing *even if*. Therefore, he admits, it is probably too strong a claim that someone uttering *Q even if P* asserts *Q*, or, indeed, that *Q even if P* logically entails *Q*. Instead, he (1991: 148) consoles himself (and the concerned reader) with the fact that his new "plus" theory of *even* does explain why *Q even if P* usually comes with a strong implication that *Q*: As mentioned above, on the new analysis, *Q even if P* is rendered as "*Q* in any expected real and relevant event, plus any in which *P*". As Lycan points out, this does entail that *Q* is among the expected real and relevant possibilities, which he says "is at least NEARLY to assert *Q*", at least in cases where there is no overt qualification to the effect that *Q* is ruled out (1991: 148). It seems, however, that whether or not *Q* is communicated is now a matter of pragmatics, i.e. it is no longer a direct result of

the encoded meaning of *even* and it isn't clear whether Lycan would now see *Q* as part of the truth-conditional content of *Q even if P*.

This shows that Lycan can, at a pinch, explain why an utterance of (4) strongly implies its consequent. The question is whether he can also explain why an utterance of (9) doesn't imply the truth of its consequent at all.

(9) Even if his wife smoked, his boss would fire him.

This is a particularly pertinent question because on Lycan's account there is no difference in the focus of *even* between the two utterances, i.e. in both cases *even* focuses on the antecedent excluding *if* and the relevant comparison class is one of conditions in both cases. It seems that Lycan would paraphrase (9) as "In any expected event that's a real and relevant possibility, his boss would fire him plus in the event that his wife smokes". Quite obviously, this isn't how an utterance of (9) in the scenario described above would be interpreted. A more appropriate paraphrase of the intended interpretation would be something like "His boss will fire him in any event in which he behaves in a 'libertine' manner plus any in which his wife smokes." It seems, then, that, for Lycan's account to work for this example, the comparison class of expected relevant and real possibilities has to be restricted to a greater extent than in the case of (4) and other examples that imply their consequents. The question is why? To find an answer to this, let me reconsider an aspect of Lycan's revised analysis.

As mentioned above, according to Lycan (1991: 147), an utterance of the form *Q, even if P* is true just in case *Q* in any expected circumstance, plus any in which *P*. In the light of the above question, the interesting aspect of this is that "any expected circumstance" can be interpreted in two ways: It could be (a) any expected circumstance at all, or (b) any circumstance one would expect to justify *Q*. In fact, for these *even if* examples to be parallel to non-conditional *even* examples, the paraphrases must contain (b). Recall that (7) is paraphrased as "Everyone you would expect **to try on the trousers** did, plus Max". That is, the relevant comparison class here includes people one would expect to try on the trousers and not people one would expect, full stop. By analogy, the relevant comparison class for (4), for instance, has to be circumstances in which one would expect the boss **to fire John** and not circumstances one would expect in general. In other words, (4) must be

paraphrased as "I wouldn't marry you in any event in which you would expect me not to marry you, plus in any event in which you are the last man on earth". Similarly, (9) must be paraphrased as "His boss would fire him in any event in which you'd expect her to fire him, plus any in which his wife smokes". Now, it may not be immediately obvious how these paraphrases can explain that an utterance of (4) implies that the speaker won't marry the hearer, while an utterance of (9) doesn't imply that John's boss will fire him.

The difference between the two cases is that, as far as circumstances in which a woman won't marry a man are concerned, those in which he is the last man on earth are about as extreme as it gets. That is, if there is any circumstance in which one would expect a woman to marry a particular man, it is, at least according to conventional wisdom, one in which he is the last man on earth. Therefore, if a woman communicates that she wouldn't marry a man in this extreme circumstance, it's more than likely that she wouldn't marry him in any other circumstance either and, therefore, that she won't marry him, tout court. By contrast, of all the circumstances in which John could be fired, that in which his wife smokes is fairly extreme, but it is by far not the most extreme. It would, for instance, be far more extreme if Sue fired John if he did everything she told him to do. In other words, the circumstance in which John's wife smokes is simply not extreme enough for it to be concluded from the fact that Sue would fire him in this circumstance that she would fire him in all other circumstances, too, and, therefore, there is no implication that she will fire him.

There is a further interesting difference between Lycan's two accounts. Recall that his initial account doesn't include the relative degrees of expectedness in the truth-conditional specification of sentences containing *even*. The new analysis, however, does, at least to some degree, for now, given the new schema for the truth conditions of *even* sentences in (23), an utterance of such a sentence can be given truth conditions only if the element in the focus of *even* **isn't** a member of the set of **expected** real and relevant possibilities.

(23) Where *S* is a sentence containing *even*, *C* is the constituent of *S* and of its corresponding *S** that is the focus of *even* in *S*, unsaturated dashes "---- ----" indicate the result of subtracting *even* and *C* from *S*, and *G* is a contextually determined class of expected, real and relevant possibilities containing at least

one member: S is true iff every member x of G plus the referent of C is such that ----x----.

This observation highlights something that is intuitively right, i.e. that there is something amiss if the element in the focus of *even* is among the class of expected elements. For instance, there would be something very strange (and unacceptable) about someone uttering (7) in a scenario in which one would expect Max to try on the trousers. However, it seems doubtful that this strangeness should be down to the fact that the utterance can't be given truth conditions in such circumstances.

7.4.4 Lycan or Bennett?

Lycan (1991) points out a number of problems with Bennett's account. One of them is that Bennett's requirement that there has to be just one S_j that meets his three conditions (i.e. that is "known", "related" and less surprising than S^*) is not strong enough. Lycan (1991: 142) envisages the following scenario: There's a party and almost everyone who's been invited is very likely to go, with the exception of Clarence, who is very shy, and James, who is virtually autistic and even less likely to go to a party than Clarence. Now, imagine there's a flu outbreak and everyone stays at home. Since James is more likely to have stayed home than Clarence, and *James stayed home* is "known" and "related" to *Clarence stayed home* in the required ways, an assertion of (24) should be felicitous according to Bennett's criteria.

(24) Even Clarence stayed home.

However, it is highly doubtful that such an utterance really would be felicitous in the given scenario – I, for one, don't find it acceptable. At the very least I find an utterance of (24) in this scenario misleading, because it implies that Clarence was less likely (or less something) than everyone else who stayed home, which isn't the case here. It seems, then, that, in particular, Bennett's requirement that there be just one S_j that is more surprising than S^* isn't sufficient.

Lycan's revised account can explain the unacceptability of this example along the following lines: As indicated above, on this new account, (24) can be given truth conditions only if Clarence isn't one of the people whom one would

expect to stay home. However, in the scenario described above, Clarence clearly would be expected to stay home.

Another point in which Lycan sees a problem with Bennett's account is connected with the latter's claim that the neighbour sentence (S_j) for a sentence, such as (4), is its consequent, e.g. (25).

(4) Even if you were the last man on earth, I wouldn't marry you.

(25) I won't marry you.

According to Lycan (1991: 120), this claim raises two questions: (i) how does S_j meet the "relatedness" condition and (ii) how can a conditional and its free-standing consequent be related as neighbours? The first question amounts to asking what general truth e.g. *If you were the last man on earth, I wouldn't marry you* and *I won't marry you* are part of. Question (ii) is more important, Lycan assumes that the notion of a neighbour sentence is grounded in that of a "natural reference-class" of items. For instance, in (7), where the focus of *even* is *Max*, this natural reference-class would be the group of individuals who tried on the trousers.

(7) Even Max tried on the trousers.

The idea is then that Bennett's third condition (concerning the unexpectedness of S^*) could be captured by saying that, compared with a salient other person (e.g. Moritz) who tried on the trousers, Max was less likely to do so. Lycan's problem with Bennett's account of conditionals such as (4) is that it is not clear that in such cases the conditional S^* and the non-conditional S_j assumed by Bennett define a similar reference-class: The conditional S^* (e.g. *If you were the last man on earth, I wouldn't marry you*) seems to suggest that the natural reference-class in question should be a set of conditions in which the speaker won't marry the hearer. If this were the case, the use of *even* in (4), for instance, would, among other things indicate that, compared with other conditions under which the speaker won't marry the hearer, the one in which he is the last man on earth is less likely. In other words, what is being compared is the relative surprisingness of a class of conditions under which the speaker wouldn't marry the hearer. The problem with Bennett's claim that S_j in this case is *I won't marry you*, as Lycan sees it, is that this isn't a condition and that it's

not possible to compare the expectedness of *you were the last man on earth* with that of nothing. Obviously, Lycan's own account, as demonstrated in 7.4.3, provides a more intuitively convincing explanation of these examples than Bennett's.

In sum, it seems that Lycan's analysis of *even* and *even if* should be preferred on two counts: First, it has no trouble explaining the unacceptability of (24) in the scenario described and, second, it gives a more intuitive account of how and why examples like (4) imply their consequents. However, it's far from clear that Lycan's analysis is correct. In particular, it is doubtful that *even* is linked with universal quantification quite in the way he envisages.

The requirement that every member x of G (which now corresponds to the set of expected real and relevant possibilities) has to be such that ----x----, e.g. that in (7) everyone who is expected to try on the trousers has to have tried them on for an utterance of the sentence to be true, still seems too strong.

(22) Everyone came to the wake. Even Granny stayed sober. Only uncle Jack got drunk.

It seems to me that (22) could be uttered perfectly felicitously and truthfully even in a scenario where the relevant comparison class includes uncle Jack and he is a confirmed teetotaller and, therefore, most decidedly among the group of people expected to stay sober. In other words, it seems that, far from being true iff everyone who was expected to stay sober plus Granny (who wasn't) did stay sober, (22) can be true in cases where not everyone who was expected to stay sober did, just as long as Granny didn't get drunk. If this is right, then it is doubtful that *even* sentences imply a universal quantification along the lines of (23).

(23) Where S is a sentence containing *even*, C is the constituent of S and of its corresponding S^* that is the focus of *even* in S, unsaturated dashes "---- ----" indicate the result of subtracting *even* and C from S, and G is a contextually determined class of expected, real and relevant possibilities containing at least one member: S is true iff every member x of G plus the referent of C is such that ----x----.

I will show later that there is a role for universal quantification here, just not quite at the level at which Lycan sees it as applying.

7.4.5 Barker: a 'non-truth-conditional' universal account

Barker starts by discussing Bennett's account of *even* and *even if* and he appeals to a number of counterexamples to show that the three conditions Bennett places on the felicitousness of *even*-sentences, though they may be necessary, are not sufficient. According to Barker (1991: 4-5), Bennett's three conditions on a neighbour sentence S_j (i.e. that it be "known", "connected" and less surprising than S^*) are met in the examples in (26)-(28), but the utterances containing *even* are still not felicitous.

(26) scenario: Looking out of the window A expects to see only family members in the front yard, he sees three figures and remarks truly:

A: There's Pa and Grandma outside and even Ronald Reagan!
B: Even Reagan is outside!

(27) A: Only three people won a prize this year: Brain and Smart, as expected, and, unexpectedly Smith, who is last year's worst student.
B: Even Smith won a prize!

(28) A: Out of a thousand people few died of the disease, two old ladies, a child, a young woman, surprisingly, and even the man everyone thought completely invulnerable.

B: Even **he** died of the disease!

As already mentioned, all three examples meet Bennett's three conditions for a neighbour S_j (and S^* is true in all cases, too). I will follow Barker in only demonstrating this for (26). Here, in B's utterance, S^* is *Reagan is outside*, and there is at least one S_j (e.g. *Grandma is outside*) available which is (i) true and salient in the context (A has just asserted it), (ii) (together with S^*) part of a single more general truth, i.e. *there are three people outside*, and (iii) less surprising than S^*.

From the existence of such counterexamples Barker concludes that Bennett's account of *even* is insufficient and he moves on to propose an alternative account of his own.

According to Barker (1991: 10), the felicity conditions of an *even*-statement are those given in (29). Note that these are assumptions that are necessary for an *even* sentence to be uttered felicitously and not truth conditions. In other words, neither (i) nor (ii) is entailed by an *even* utterance – they are both 'merely' implied.

(29) (i) S^* and S_j are asserted as universal instantiation cases of an implied or stated S_u.

(ii) S^* is an extreme instance of S_u.

On this account, a sentence like (7) can be uttered felicitously just in case *Max tried on the trousers* (S^*) and, say, *Moritz tried on the trousers* (S_j) are asserted as universal instantiation cases of an implied or stated S_u, e.g. *Everyone in the group tried on the trousers*, and that *Max tried on the trousers* (S^*) is an extreme case of *Everyone tried on the trousers* (S_u).

(7) Even Max tried on the trousers.

There's an obvious problem with this, namely that the S_j in question (e.g. *Peter tried on the trousers*) doesn't have to be explicitly asserted at all for an utterance of an *even* sentence to be felicitous. (7), for example, can be asserted without any S_j being asserted along with it[10]. Giving the benefit of the doubt to Barker, I will assume that by 'assert' he may mean nothing stronger than 'communicate' and it does seem right that a speaker uttering (7) will at least be communicating that someone else tried on the trousers too (though I'm not convinced that anything more specific than that, e.g. that Moritz tried on the trousers, needs to be recovered by the hearer in order to understand the utterance). However, if 'asserting' is merely understood as 'communicating', then an important difference in status between S^* and S_j is lost: As many theorists have observed (e.g. Karttunen & Peters 1979: 12), if S^* turns out to be false, the whole utterance will have been false, while the falsity of S_j is

[10] In claiming that S_j must be asserted, Barker's account appears to echo Anscombre & Ducrot (e.g. 1983), who only seem to consider examples of the form *P, and even Q* and analyse *even* as indicating that *Q* is the stronger argument than *P* for the same conclusion *R* (cf. 3.3.4).

sufficient to make the utterance infelicitous but not false. However, these are relatively minor considerations.

Whatever problems Barker's account might encounter, it looks as though he can at least explain why the *even* utterances in (26)-(28) are not felicitous. For instance, in (26) S^* is *Reagan is outside*, while the S_js are *Pa is outside* and *Grandma is outside*. The problem is that it's hard to see what S_u these S_js could be instantiations of. It can't be *all members of A's family are outside* and it can't be *all American citizens are outside*. This explains why an *even* utterance in this scenario is infelicitous. It seems clear that similar explanations can also be given for the *even* utterances in (27) and (28). In the former, the S_u can be neither *all students won a prize* nor *all talented students won a prize* and in the latter it can't be *everybody died of the disease* or *everybody weak died of the disease*.

Let me now turn to the question of how Barker's account of *even* works in cases like (4) where *even* combines with a conditional.

(4) Even if you were the last man on earth, I wouldn't marry you.

Analogous to other examples involving *even*, an utterance of (4) will be felicitous just in case S^* (*If you were the last man on earth, I wouldn't marry you*) and S_j (e.g. *If I was in love with someone else, I wouldn't marry you*) are instantiations of an explicit or implied S_u (e.g. *I wouldn't marry you under any circumstance*) and S^* is an extreme case of S_u. If this is, indeed, how Barker would account for the example in (4), then it seems that he can explain with ease why an utterance of this sentence implies that the speaker won't marry the hearer. If she won't marry him under any circumstance, then she clearly won't marry him, full stop. What is more, it seems that Barker's account can also explain why an utterance of (9) in the envisaged scenario (i.e. one in which the boss is so puritanical she won't stand for any 'libertine' behaviour on the part of her employees or their families) does not entail that his boss will fire him.

(9) Even if his wife smoked, his boss would fire him.

Here, Barker might claim, the implied S_u is not *His boss would fire him in any circumstance* but rather *His boss would fire him in any circumstance in which he or*

his family are behaving in a 'libertine' manner. As he himself (1991: 16) states, this means that, in cases where an utterance of *Q even if P* 'entails' *Q*, this isn't due to its logical form. Instead, it seems that the difference in implications between these two examples is down to a difference in the domain of the universal quantification that is implied by the use of *even*, i.e. in the case of (4) the speaker is understood to be quantifying over all circumstances, while in (9) she is only understood to be quantifying over circumstances in which John or his family behave in a 'libertine' manner. Clearly, there is nothing semantic (i.e. encoded) that determines the domain of quantification in each case. In other words, the hearer has to work out what it is on purely pragmatic grounds.

Barker (1994) gives a more detailed account of the "consequent-entailment problem" for *even if*-conditionals. In particular he (1994: 252 & 254) considers cases where, according to him, the focus of *even* isn't on the whole antecedent but only on one particular word in the antecedent. For instance, in (30) *if* is the focus of *even* and in (31) it is *does*.

(30) Even **if** Basil turns up, the party will be fine.

(31) The party will be fine even if Basil **does** turn up.

In such cases, Barker believes, there is only one S_j available, namely *the party will be fine if Basil doesn't turn up* and the universal quantification associated with *even* quantifies over a domain of just two constituents: S^* and S_j. In other words, the universal quantification implied by (30) and (31) is that in (32).

(32) In either case, if Basil turns up or doesn't turn up, the party will be fine.

This means that Barker's analysis of at least some *even if*-conditionals is quite close to Bennett's in that he treats them as implying only one neighbour sentence. Note, however, that Barker avoids the difficulty for Bennett discussed in 7.4.4, because both S^* and S_j on his account are conditional and it is, therefore, possible to compare straightforwardly their relative likelihoods (or to say that one is more extreme than the other).

From the above discussion, it will be clear that Barker's (1991) account shares much with Lycan's (1991), though the two were developed independently of

each other. Not the least of their similarities is that they both see an important role for universal quantification. However, they differ in that, for Lycan, the universal quantification is a matter of the truth conditions of *even* sentences, while, for Barker, it is merely a matter of felicity conditions. Furthermore, Barker's analysis is closer to Lycan's initial account than to the account Lycan ultimately adopts. For this reason, Barker's account encounters problems not just in the form of the counterarguments to Lycan's revised analysis but also those to his initial analysis. This is the case although Barker treats as non-truth-conditional much of what Lycan treats as truth-conditional, because none of the counterarguments to Lycan's analyses aim at their truth-conditional status.

Summing up, the proponents of the 'universal' accounts discussed in this section highlight a number of counterexamples to Bennett's 'existential' analysis, and their accounts are equipped to deal with them. However, neither Lycan's nor Barker's analyses are entirely satisfactory themselves because they still can't adequately account for the full range of examples involving *even*. In the next section I will consider a further 'existential' account to see whether there are ways of avoiding the difficulties with Bennett's analysis without having to buy into the problematic idea of *even* as a universal quantifier.

7.5 An 'existential' alternative: Francescotti (1995)

Francescotti (1995) offers an alternative to Lycan's and Barker's accounts of *even* in 'non-truth-conditional', 'existential' terms and, thus, an analysis much closer in spirit to Bennett's. Like Bennett (and Barker), he doesn't believe that *even* affects the truth conditions of the utterances in which it occurs, instead he believes that *even* carries a conventional implicature. However, his analysis differs from Bennett's in that it requires more than one true neighbour to be more likely (or less surprising) than *S**. The felicity conditions on the use of *even*, according to Francescotti (1995: 162 & 167), are those in (33).

(33) (i) for *any* contextually-determined, true neighbour S_j of *S**, the truth of *S** and that of S_j can naturally be seen as parts of a more general truth, and

(ii) there is some contextually-determined aspect X, such that S^* is more surprising than most S_js with respect to X.

This analysis avoids all counterexamples to accounts of *even* in terms of universal quantification. For instance, recall (22) uttered perfectly felicitously and truthfully in a scenario in which uncle Jack is a confirmed teetotaller. As I argued above, Lycan's revised analysis can't account for this example – according to him, an utterance of (22) is true just in case Granny stayed sober in addition to everyone whom one would have expected to stay sober (a group which clearly includes uncle Jack in the envisaged scenario).

(22) Everyone came to the wake. Even Granny stayed sober. Only uncle Jack got drunk.

Barker's analysis, too, can't deal with this example adequately. According to him the *even* sentence must be an extreme instance of a universally quantified assumption and it isn't clear what this could be in this scenario. It certainly can't be *all relatives stayed sober* or *everyone at the wake stayed sober.* In other words, both Lycan and Barker would predict the *even* utterance in (22) to be infelicitous in the envisaged scenario and Lycan would predict it to be false. Clearly, it is neither.

Francescotti's account can deal with this example without any problems. According to him, an utterance of (22) is felicitous just in case the following two conditions hold. (i), any contextually determined S_js (e.g. *Auntie Jill stayed sober, Dad stayed sober, Mum stayed sober,* etc.) can be seen as forming part of a more general truth together with S^* (i.e. *Granny stayed sober*). In the envisaged scenario, this general truth might be something like 'A great number of family members stayed sober at the wake'[11]. (ii), there is some contextually-determined aspect X , such that S^* (*Granny stayed sober*) is more surprising than most of the S_js (*Auntie Jill stayed sober, Dad stayed sober, Mum stayed sober,* etc) with respect to X (which might be something like 'subjective likelihood').

[11] In my discussion so far I've been happily ignoring my very serious worries about this notion of "single more general truth", first introduced by Bennett (1982) and adopted by Francescotti (1995). I will address these worries in my evaluation of Francescotti's analysis below.

Interestingly, this shows that Francescotti's analysis does involve universal quantification. That is, his condition (i) states that **any** S_j must form part of a more general truth together with S^*. Contrary to Lycan and Barker, he doesn't require there to be universal quantification over a comparison class, i.e. there is no claim that (22) should imply or entail that **everyone** in a particular group stayed sober. As it stands Francescotti's account actually doesn't seem to require that **anyone** other than Granny stayed sober either, but this is clearly an oversight. That is, his analysis should, surely, specify that for the felicitousness of an *even* utterance at least one true S_j fulfilling the conditions in (33) is needed – no doubt, he is implicitly assuming this, but for a completely explicit and adequate analysis he would need to include this as one of his felicity conditions. After all, the need for the truth of at least one neighbour sentence for the felicitous utterance of an *even* sentence seems to be one of the few points on which all theorists agree – nobody is claiming that an utterance of (7) could be **felicitous** if Max was the only person who tried on the trousers (though, of course, consensus on whether it could be **true** in the same circumstances is less widespread).

(7) Even Max tried on the trousers.

Francescotti's account can also deal with Lycan's counterexample to Bennett, i.e. (24) uttered in a scenario in which everyone stayed home and Clarence was slightly less likely to stay home than James, but more likely than anyone else.

(24) Even Clarence stayed home.

Recall that the problem for Bennett was that there is one S_j (i.e. *James stayed home*) that is true, known and less surprising than S^* (*Clarence stayed home*). Francescotti's condition (ii) means that he can deal with this example. As mentioned above, this condition states that S^* must be more surprising than **most** S_js. Now, the difficulty with example (24) in the envisaged scenario isn't a lack of true or related S_js (everybody stayed home, so there is a large supply of S_js – one for each member of the group). The problem is that S^* (*Clarence stayed home*) is **more** likely than most of them and only **less** likely than one of them (i.e. *James stayed home*). In other words, in this scenario, Francescotti's condition (ii) isn't met – Clarence wasn't

less likely to stay home than **most** of the others who did – and he would correctly predict an utterance of (24) to be infelicitous in this scenario.

Let me now consider how Francescotti's account of *even* fares with the *even if* examples (4), (6) and (9). The most important question is whether and how he could explain why (4) 'entails' or implies its consequent while the other two don't.

(4) Even if you were the last man on earth, I wouldn't marry you.
(6) Even if he drank just a little his boss would fire him.
(9) Even if his wife smoked, his boss would fire him.

Intuitively, it seems to me that he might not find it entirely straightforward to explain why (4) strongly implies that the speaker won't marry the hearer. If one his (1995: 162 & 167) two conditions to (4), its utterance should be felicitous just in case the conditions in (34) hold.

(34) (i) for any contextually-determined true neighbour S_j (e.g. *If I were in love with somebody else, I wouldn't marry you*; *If I didn't like you, I wouldn't marry you*; etc.) of S^* (i.e. *If you were the last man on earth, I wouldn't marry you*), the truth of S^* and S_j can naturally be seen as parts of a more general truth, and

(ii) there is some contextually-determined aspect X, such that S^* (i.e. *If you were the last man on earth, I wouldn't marry you*) is more surprising than most of the S_js with respect to X (which could be something like 'generally accepted standards').

It seems to me that the only way in which this could predict that an utterance of (4) 'entails' or implies that the speaker won't marry the hearer is that the "more general truth" S^* and S_j must naturally be part of is something like 'I wouldn't marry you in any circumstance'. There is, however, absolutely nothing in this analysis that indicates that the "more general truth" in question couldn't be something weaker, e.g. 'There are a number of circumstances in which I wouldn't marry you'. It seems then that this analysis leaves it entirely up to pragmatics whether or not an utterance of *Q even if P* implies *Q* or not. Now, given that not all utterances of *Q even if P* do seem to imply the truth of *Q*, this doesn't strike me as an undesirable outcome.

Nevertheless, the adequacy of an analysis that does leave this kind of question to pragmatics to decide can be judged only once the pragmatic processes involved have been accounted for – unfortunately, Francescotti (1995) doesn't provide such an account.

Above, I have shown that Francescotti's has no problems in dealing with Lycan's counterexample to Bennett's analysis. However, things are less straightforward when it comes to Barker's counterexamples. I'll here just look at one of the three examples Barker (1991: 4-5) cites (they are all listed in 7.5.4).

(27) A: Only three people won a prize this year: Brain and Smart, as expected, and, unexpectedly Smith, who is last year's worst student.
B: Even Smith won a prize!

According to Barker, B's utterance in (27) is infelicitous even though it fulfils Bennett's three conditions. So, does it also meet Francescotti's two conditions or does his account deal with this type of example adequately? On Francescotti's account the felicity conditions for B's utterance here would be something like those in (35).

(35) (i) for any contextually-determined, true neighbour S_j (i.e. *Brain won a prize*, *Smart won a prize*) of S^* (*Smith won a prize*), the truth of S^* and that of S_j can naturally be seen as parts of a more general truth, and
(ii) there is some contextually-determined aspect X, such that S^* (*Smith won a prize*) is more surprising than most S_js (*Brain won a prize, Smart won a prize*) with respect to X (which here might be something like 'likelihood on the basis of previous performance').

Once more it seems to me that the key point is that of the "more general truth" required by condition (i). One way in which one might explain why B's utterance in (27) is not felicitous is by claiming that there is no "more general truth" that S^* and the S_js could naturally be seen as part of. If that were the case, then this wouldn't be a counterexample to Bennett's account either. However, Barker takes care of this possibility by maintaining that the more general truth in question could easily be

'only three people won a prize'. Now, one way in which Francescotti (or Bennett, for that matter) could respond to this is to say that, for one reason or another, 'only three people won a prize' isn't the right kind of general truth. This, of course, is begging the question. Francescotti (1995: 170-172) opts for a different response.

His first step is to argue against Barker's own analysis of *even*. Although he does so convincingly and on perfectly good grounds, this course of action can hardly be seen as dealing with the counterexample. He tackles this by arguing that the infelicitousness of Barker's example has nothing to do with the use of *even* itself. He first states that *S** only has two true neighbours (*Brain won a prize* and *Smart won a prize*) and that, therefore, *Smith won a prize* "is just barely in the majority" (Francescotti 1995: 171). I am not entirely sure what he means by this, but I assume that he must be referring to his condition (ii), according to which *S** has to be more surprising than most of its true neighbours. If this is the case, what he must mean is that *Smith won a prize* is only just more surprising than **most** of its true neighbours. Quite obviously, that's not the case. As mentioned above, in this scenario *Smith won a prize* has only two true neighbours, i.e. *Brain won a prize* and *Smart won a prize*, and, as Francescotti (1995: 170) himself concedes, in the envisaged scenario it is clearly more surprising than either of those. In other words, *S** (*Smith won a prize*) is not only more surprising than **most** of its true neighbours – it's more surprising than **all** of them. So, this first step in Francescotti's reply to Barker's counterexample is at best mysterious and at worst quite wrong.

The second step Francescotti takes is to argue that the use of *even* in B's utterance in (27) is missing the speaker's point. According to him (1995: 171), this utterance "would be appropriate only if the speaker were emphasising the unexpectedness of Smith's winning relative to that of Brain and Smart" and he further claims that A's utterance is doing something completely different, i.e. stressing how few people won a prize and how surprising Smith's winning a prize is given that so few people did. He maintains that (36), which captures the point that is being made by A more accurately, is perfectly acceptable.

(36) You mean even Smith won a prize when so few were able to do so!

Whether or not this utterance is acceptable, this line of argument still doesn't address Barker's worry. B still wouldn't be able to utter *Even Smith won a prize* in a

scenario in which the content of A's utterance was true and known by B, but in which A hadn't said anything and, therefore, there would be no point of A's utterance for B's utterance to be missing. It seems, then, that these examples need an explanation that isn't provided by Francescotti.

To conclude this section, although Francescotti gives an account that can avoid all counterexamples to the 'universal' analyses discussed in 7.4, as well as Lycan's counterexample to Bennett's account, Barker's counterexamples to Bennett's account present a problem for Francescotti, too. In other words, none of the accounts discussed so far can deal with the full range of examples. In the next section, I will give a summary of these problematic examples, who they're problematic for and why, before considering a question I have touched on without trying to resolve it, i.e. whether the meaning of *even* makes a difference to the truth conditions of the utterances in which it occurs.

7.6 Taking stock

7.6.1 The problematic examples

As just mentioned, none of the accounts of the meaning of *even* discussed so far can handle all the possible counterexamples that have been appealed to. It seems that 'universal' accounts equipped to deal with examples problematic for 'existential' accounts run into problems avoided by 'existential' accounts and vice versa. In what follows I will 'translate' all counterexamples into one scenario in the hope that it may become clearer how to find an analysis of *even* that can handle them all.

Since what seems to be needed for all counterexamples is a group of people who are ranked in some way according to the likelihood or surprisingness[12] of their doing something, I will stick with a group of students and the relative likelihoods of each of their passing an exam. They are listed in (37), starting with the most likely to pass.

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[12] Lycan (1992: 122) and Francescotti (1995: 164-168) both refer to Kay's (1990) arguments against treating *even* as necessarily involving the notion of likelihood or unexpectedness. However, Francescotti convincingly argues that Kay's (1990: 84) examples ultimately all can be accounted for in terms of relative unexpectedness.

(37) June, Mark, April, Julie, Augusta, Sebastian and Neville.

Now, Lycan's counterexample to Bennett can be translated as (A).

(A) Scenario: Everyone failed the exam, Sebastian and Neville are both more likely to fail than the others and Neville is more likely to fail than Sebastian.

Susan: ?Even Sebastian failed the exam.

This presents a problem for Bennett because his account doesn't require more than that there be one S_j (in this case, *Neville failed the exam*) that is less surprising than S^*. As Francescotti shows, all that is needed to avoid this counterexample is a strengthening of this to the requirement that S^* be more surprising than **most** S_js, which isn't fulfilled under the circumstances.

Barker's counterexample translated into these terms might come out something like (B).

(B) Scenario: Only June, Mark and Neville pass the exam and the others don't.

Susan: ?Even Neville passed the exam.

Because Neville's passing the exam is more surprising than either of the others', this example not only meets Bennett's conditions but also Francescotti's. In fact, set out like this, this example might present a problem for Lycan's revised account, too. It is at least conceivable that June and Mark were the only people expected to pass the exam on this occasion and, therefore, that Lycan's truth condition is met, i.e. that everyone who was expected to pass, plus Neville, did pass. So, the only account that can deal with this example is Barker's own, which requires that *Neville passed the exam* be an extreme instance of a universal quantification, such as *everyone in the*

group passed the exam. Clearly, this requirement isn't met in the envisaged scenario[13].

However, there are counterexamples to this account, too. Recall, for instance, the counterexample to Lycan's first account. Applied to our group of students, Susan's utterance is perfectly acceptable in the scenario in (C) even though not everyone in the group passed the exam.

(C) Scenario: Everyone except Neville passed the exam.

Susan: Even Sebastian passed the exam.

Assuming that, in this scenario, everyone, except Neville and Sebastian, was expected to pass the exam, Lycan's revised account can explain why this utterance is acceptable (and would be judged true): it is, indeed, the case that everyone who was expected to, plus Sebastian, passed the exam. Barker would find it more difficult to deal with this example, because, for him, its acceptability requires that *Sebastian passed the exam* be an extreme instance of a universal quantification. However, it's difficult to see what this universal quantification could be. It can't be *everyone in the group passed the exam*, because Neville didn't, and it can't be *everyone who was expected to passed the exam*, because Sebastian isn't a member of the group of people who were expected to pass and, therefore, *Sebastian passed the exam* couldn't be an extreme instance of that quantification. It seems that the only alternative is the tautologous *everyone who passed the exam passed the exam.*

Finally, there is my own counterexample to Lycan's revised account. This can be translated as (D). Again, Susan's utterance is perfectly acceptable, even though not everyone who was expected to pass did.

(D) Scenario: Everyone passed the exam with the exception of June, who failed for mysterious reasons.

Susan: Even Neville passed the exam.

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[13] It will be seen below that my adapting Barker's original examples makes it more difficult to account for.

In fairness to Lycan, it has to be said that Susan's utterance on its own, without her adding that June failed would most likely be taken to be implying that everyone, including June, did pass. The problem is more that such an overt qualification doesn't result in any sort of contradiction, which casts doubt on Lycan's claim that the universal quantification of "everyone who was expected to, plus Neville, passed the exam" is a matter of the truth-conditional content of Susan's utterance in (D) (this question will be discussed in greater detail in 7.6.2).

Since Barker doesn't claim that the universal quantification is anything more than an implicature, it seems that this example doesn't present a problem for him. After all, implicatures can be cancelled without contradiction. However, if Barker sees the implication of a universal quantification as a matter of **conventional** implicature, i.e. the **encoded** meaning of *even*, there might yet be a problem, because it isn't normally possible to cancel a conventional implicature without contradiction. For instance, (38), where the *but*-clause is intended to cancel the premise-conclusion relationship conveyed by the use of *therefore*, sounds odd in way that (39), where the *but*-clause cancels the assumption that everyone in the group passed the exam doesn't.

(38) ?Peter is an Englishman and he is, therefore, brave, but I don't mean to imply that his being brave follows from his being an Englishman.

(39) Even Neville passed the exam, but not everyone did.

Even if Barker could deal with this example, it has been shown that his account trips up on (C).

Summing up, it seems that the most difficult example to accommodate is (B), which is analogous to Barker's (26)-(28). Out of all the accounts considered only Barker's own can explain why this is unacceptable. However, (C) (and conceivably also (D)) present an insurmountable difficulty to Barker's account. The challenge, then, is to find an account that is 'universal' enough to explain why Susan's utterance in (B) is unacceptable, but not so 'universal' that it couldn't account for the acceptability of (C) and (D).

7.6.2 Is *even* truth-conditional?

It was mentioned in the introduction to this chapter that König treats *Q even if P* as truth-conditionally different from *Q if P* (and *Q although P*). It has also been seen that Lycan treats *even* as making a difference to the truth conditions of the utterances in which it occurs. Everyone else, however, sees the contribution of *even* roughly in terms of conventional implicature[14]. Since there is such a sharp divide between accounts, it should be possible to choose between them, at least as far as the truth-conditional status of *even* is concerned, by testing whether or not *even* affects the truth conditions of its host utterances.

As mentioned before, a good way of sharpening one's intuitions about the truth conditions of a given utterance is to embed the sentence in question in the scope of a logical operator or a causal connective and see whether the element of meaning in question falls under the scope of the operator. I'll start by considering the effect of *even* when added to a conditional (when its focus is the whole antecedent). (41) is an embedding of (40) and (43) is one of (42).

(40) Sue wouldn't marry Phil even if he had a beard.

(41) Because Sue wouldn't marry Phil even if he had a beard, he'd better not propose to her.

(42) Sue wouldn't marry Phil if he had a beard.

(43) Because Sue wouldn't marry Phil if he had a beard, he'd better not propose to her.

The question is whether a speaker uttering (41) is giving a different reason why Phil had better not propose to Sue than a speaker uttering (43). There does, indeed, seem to be a difference. A speaker uttering (41) seems to be saying that Phil shouldn't propose to Sue because she would refuse him in any circumstance. A speaker uttering (43), on the other hand, seems to be saying that the reason Phil shouldn't propose to Sue is that she wouldn't marry him if he had a beard (and, therefore, that

[14] Note that the notion of 'conventional implicature' intended here is to be understood in a weaker sense than Grice's speech-act notion, i.e. simply as 'non-truth-conditional' encoded linguistic meaning.

she has an irrational prejudice against bearded men or, perhaps, that she doesn't really love him, because she would be put off by something as trivial as his having a beard). It seems, then, that *even* does make a difference to the truth conditions of the conditional sentences it occurs in. The question is whether König is right and those truth conditions are (or at least include) *Sue won't marry Phil.* If this were the case, then a speaker uttering (41) should be taken to claim that the reason why Phil shouldn't propose to Sue is that she won't marry him and there should be no appreciable difference between an utterance of (41) and one of (44).

(44) Because Sue won't marry Phil, he'd better not propose to her.

Now, I'm not satisfied that there is no difference between these two utterances and not even that they both give the same reasons why Phil shouldn't propose to Sue. It seems that König doesn't get the truth conditions of 'concessive' conditionals right. However, there is a difference between the reasons given in (41) and in (43) and, therefore, in the truth conditions of (40) and (42). So, can the only other 'truth-conditional' account, i.e. Lycan's, capture this difference?

Recall that, according to Lycan, *even if P, Q* is true just in case *Q* in every expected circumstance plus in those in which *P*, while *if P, Q* is true just in case *Q* in any circumstance in which *P*. This means that, on his account, (40) should be true just in case Sue won't marry Phil in any circumstance in which one would expect her not to marry him, plus in any circumstance in which he has a beard. This should also be the reason why Phil shouldn't propose to her given in (41). By contrast, (42) should be true if and only if Sue won't marry Phil in any circumstance in which he has a beard and this should be the reason given in (44). Clearly, Lycan's account of these examples comports with intuitions better than König's. Nevertheless, it seems to me that the reason given by a speaker uttering (41) isn't that Sue won't marry Phil in any expected circumstance plus in any circumstance in which he has a beard, but, rather, that Sue won't marry Phil in any circumstance (including any in which Phil has a beard). In other words, Lycan's initial account seems better able to cope with this example. However, as seen in 7.4.2, there are a number of good reasons for not adopting this account. So, how can the difference between (41) and (43) be explained? And, more specifically, does this difference really indicate that there is a truth-conditional difference between (40) and (42)?

If the answer to this last question is negative, then this has some serious consequences for the usefulness of the scope test. That is, if it turns out that something that clearly isn't part of the truth-conditional content of an utterance can, nevertheless, fall under the scope of a causal connective, then falling under the scope of a causal connective is no longer indicative of truth-conditionality. Worryingly, it seems that this is possible. Consider Mary's utterance in (45).

(45) Peter: Would you like to go to the cinema?
Mary: I'm tired.

Quite clearly, Mary communicates that she doesn't want to go to the cinema with her utterance. Equally clearly, *Mary doesn't want to go to the cinema* isn't part of the truth conditions of her utterance of *I'm tired* – that utterance is true just in case Mary is tired (to some specific degree). However, a speaker uttering (46) is surely conveying that the reason why Peter won't book cinema tickets is that Mary won't want to go to the cinema and not that she is tired.

(46) Because Mary is tired, Peter won't book cinema tickets.

In other words, *because* seems to take in its scope an aspect of the interpretation of *Mary is tired* that clearly isn't part of its truth-conditional content. This means, that embedding under the scope of *because* isn't as reliable a test for truth-conditionality as previously assumed. Why could this be?

Looking for causal connections seems to be a central human pursuit (witness the fact that *and*-conjunctions and juxtapositions of two sentences seem to be given causal interpretations wherever possible). In fact, it isn't particularly surprising that humans do pay so much attention to causal connections. After all, if it can be established that there is a causal connection, say, between events of type A and events of type B, then it will be possible to make reliable predictions about what is going to happen once an event of type A has taken place. In other words, assumptions concerning causal connections are valuable to a cognitive system because they enhance its predictive power. Therefore, a possible explanation for the fact that *because* can take in its scope more than just truth-conditional content is that causal connections are so important to us. If this is the case, then the scope test

might be saved if it is restricted to logical operators. However, causality is so pervasive that *if...then* gets interpreted causally wherever possible, and (47) shows that it, too, seems capable of taking scope over 'non-truth-conditional' aspects of meaning.

(47) If Mary is tired, Peter won't book cinema tickets.

This only leaves the natural language equivalent to (exclusive) *v*, i.e. *either...or* (I'm assuming that negation is ruled out because of its great metalinguistic potential). So, the question is whether embedding (40) and (42) under the scope of *either...or* shows a difference between them. If these two utterances are truth-conditionally equivalent (and if *either...or* only takes scope over truth-conditional meaning) an utterance of (48) has the logical form of *either P or P* and it should be unacceptable, because of redundancy.

(48) ??Either Sue wouldn't marry Phil even if he had a beard or Sue wouldn't marry Phil if he had a beard.

It's not clear that there is no redundancy here, and the utterance doesn't seem particularly acceptable. However, this could be because *if* utterances can, in the right circumstances receive an *even if* interpretation and having the *even if* sentence first makes accessible this interpretation. Therefore, the order of the two should be changed to exclude this possibility.

(49) ?Either Sue wouldn't marry Phil if he had a beard or Sue wouldn't marry Phil even if he had a beard.

Interestingly, (49) doesn't seem particularly acceptable either (though perhaps slightly more so than (48)). It seems, then, that *even* might not make a difference to the truth conditions of the utterances in which it occurs after all. However, caution is advisable even where *either...or* is concerned – (50) shows that this construction, too, can be used metalinguistically.

(50) Either you went to see the hippopotamuses or you went to see the hippopotami.

The 'moral' of the discussion in this sub-section is that the embedding test isn't as reliable as one might like to think. In fact, there might be a good explanation for this. The claim that *if...then* and *either...or* can only take scope over the truth-conditional content of utterances seems to be based on the assumption that they correspond to the logical connectives $\rightarrow$ and v (exclusive). However, while this **might** be true of their **encoded** meaning, there is absolutely no reason to assume that this is all they convey when used in utterances. In other words, there seems to be far too much 'interference' in the shape of inferred meaning for the scope test to work reliably. This means that the conclusion of this sub-section is somewhat unsatisfactory: it isn't clear whether *even* affects truth conditions or not. I will argue in 8.3.2 that the questions of what the truth conditions are of a given utterance and whether a particular expression contributes to them aren't at all important for a cognitive account of utterance interpretation. What one should concentrate on, instead, is (a) the totality of what is communicated by an utterance and (b) its encoded meaning. Thus, I return to the question of the linguistically encoded meaning of *even*.

7.7 A cognitive approach to *even* and *even if*

7.7.1 Contradiction and elimination

Delgado (1999) proposes an account of *even* grounded in the framework of Relevance Theory. According to her, *even* encodes a procedure which indicates two things[15]: (a) that the utterance is to be processed in a context of assumptions that differ from the proposition expressed (S^*) only in the element in the focus of *even* (i.e. a context of S_fs); and (b) that the context must also contain the contradictory of S^*. In other words, an utterance of S has the cognitive effect of contradicting and eliminating an existing assumption, i.e. $\neg S^*$. For a case like (7) this means that the

[15] For arguments in favour of *even* encoding procedural, rather than conceptual, meaning, see 4.6.7.

utterance is to be processed in a context that contains, for example, the assumptions in (51).

(7) Even Max tried on the trousers.

(51) a. Moritz tried on the trousers.

b. Fritz tried on the trousers.

c. Max didn't try on the trousers.

In such a context, an utterance of (7) will achieve cognitive effects by contradicting and eliminating the assumption in (51c). Indeed, this seems to comport well with intuitions. As mentioned above, there is a certain amount of consensus regarding *even* utterances, particularly in two points: Most theorists are agreed that (a) *even* provides access to a comparison class of entities similar to that in its focus and (b) *even* indicates that there is something surprising or unexpected about S^*. Delgado's analysis captures both of these points of agreement: (a) is reflected in the fact that S is to be processed in the context of at least one S_j and (b) in the fact that the negation (or contradictory) of S^* is to be part of the context as well – in a context in which $\neg S^*$ is manifest (or 'expected') S^* will be unexpected or surprising. So far, it seems that Delgado provides an adequate analysis of the meaning of *even*, but how does she deal with the *even if* examples discussed above?

In dealing with *even if*, Delgado's (1999) first step is to adopt Barker's (1994) view of natural language *if*. He (1994: 256-257) argues that *if* should not be analysed as a two-place connective (along the lines of material implication, for instance). Instead, he proposes to follow Dudman (1989) in treating *if* as a monadic operator taking P in its focus. On Barker's view, *if* P conventionally implicates that P is being **supposed** by the speaker and the result of combining *if* P with Q is that it signals that the speaker is asserting Q conditionally on P, i.e. the assertion is partly based on the supposition of P. There is much that is wrong with this account. However, I will leave aside any worries and continue with my presentation of Delgado's analysis.

(4) Even if you were the last man on earth, I wouldn't marry you.

(6) Even if he drank just a little his boss would fire him.

(9) Even if his wife smoked, his boss would fire him.

By analogy to her own example, she might analyse (4) along the lines in (52)

(52) *S**: SUPPOSITION (Peter is the last man on earth), Mary won't marry him.
S_j: Since Peter isn't the last man on earth, Mary won't marry him.
Manifest assumption:
SUPPOSITION (Peter is the last man on earth), Mary will marry him.

An utterance of (6) might be analysed as (53), and an utterance of (9) as (54).

(53) *S**: SUPPOSITION (John drinks just a little), his boss will fire him
S_j: SUPPOSITION (John drinks a lot), his boss will fire him.
SUPPOSITION (John drinks a massive amount), his boss will fire him.
SUPPOSITION (John drinks any amount), his boss will fire him.
Manifest assumption:
SUPPOSITION (John drinks just a little), his boss won't fire him.

(54) *S**: SUPPOSITION (John's wife smokes), his boss will fire him.
S_j: SUPPOSITION (John himself smokes), his boss will fire him.
SUPPOSITION (John drinks), his boss will fire him.
SUPPOSITION (John behaves in what his boss would consider a libertine manner), his boss will fire him.
Manifest assumption:
SUPPOSITION (John's wife smokes), his boss won't fire him.

Although Delgado (1999) doesn't explore this, the advantage her account has over the other accounts considered in this chapter is that, because it is rooted in the framework of Relevance Theory, it has a convincing story to tell about how the S_js are selected, i.e. why in (52) there is only one S_j (*if not-P, Q*), while in (54) there are a number of them (**not** *if not-P, Q*, but *if X, Q*; *if Y, Q*, *if Z, Q*, etc.). As with all aspects of utterance interpretation, the communicative principle of relevance licenses the hearer to follow a path of least effort in considering possible S_js and stopping as soon as the expectation of relevance created by the utterance has been met.

For instance, in the scenario in which Mary utters (4), the assumption that Mary won't marry Peter if (as is, indeed, the case) he isn't the last man on earth is easily accessible – more easily, at any rate, than any other possible S_js (e.g. *If I was in love with someone else, I wouldn't marry you*). In the scenario in which Sue utters (9), on the other hand, the assumption that Sue will fire John if his wife doesn't smoke isn't all that easily accessible (and if it were, it would be quite likely to be dismissed as false). Instead, S_js like *If John smoked, his boss would fire him* or *If John drank, his boss would fire him* will be highly accessible (in fact, they, or similar assumptions, are quite likely to have been mentioned explicitly before the utterance in (4)).

It is a further advantage of Delgado's account (also one she herself doesn't mention) that it seems able to avoid Barker's (1991: 4-5) counterexamples to Bennett's account. For instance, while there are two easily accessible S_js to B's utterance in (27), i.e. *Brain won a prize* and *Smart won a prize*, it seems that the contradictory of *S** (i.e. *Smith didn't win a prize*) is no longer manifest by the time B comes to make her utterance. On the contrary, after A's utterance (assuming that A is trustworthy and B believes him), *S** (*Smith won a prize*) is mutually manifest, rather than its contradictory (*Smith didn't win a prize*).

(27) A: Only three people won a prize this year: Brain and Smart, as expected, and, unexpectedly Smith, who is last year's worst student.
B: Even Smith won a prize!

Since the other two examples Barker uses to argue against Bennett's account are set up in a similar way, i.e. *S** is manifest in both of them prior to the unacceptable *even* utterance, Delgado's analysis can deal with all of them.

7.7.2 Problems with Delgado's account

As already mentioned, at first blush Delgado's analysis of *even* seems to do justice to intuitions and to at least some of the examples discussed in this chapter. However, I have a number of worries about her account. There are two reasons for this: (a) I believe that *even* utterances do not always have to (and in fact often don't) achieve cognitive effects by contradicting and eliminating a manifest assumption, and (b) it

seems that simply requiring that the contradictory of *S** and at least one S_j be available isn't quite enough.

Let me start with my first worry.

(55) scenario: A and B are discussing C's publicly and embarrassingly insisting that Sydney is the capital of Australia.

A: That was a pretty stupid thing to do.

B: Well, even C makes mistakes.

It seems to me that B's utterance in the scenario in (55) is perfectly felicitous, even though the contradictory of *S** (i.e. *C doesn't make mistakes*) isn't manifest in the context (on the contrary, *S** is already mutually manifest before B utters *S*). Nevertheless, B's utterance in this scenario is perfectly felicitous. This example also shows that Kay (1990: 84) is right in claiming that the use of *even* doesn't necessarily imply the unexpectedness of *S**.

My second worry is reflected in the example in (56), which involves the by now familiar group of students.

(56) scenario: As is mutually known to A and B, Sebastian is unlikely to pass any exam, but Neville is even less likely.

A: A miracle has happened – Neville passed the exam!

B: ?Even Sebastian passed the exam.

Quite clearly, B's utterance in (56) is not felicitous. However, all the ingredients of Delgado's account are available: There's an easily accessible S_j (*Neville passed the exam*) and the contradictory of *S** (i.e. *Sebastian didn't pass the exam*) is manifest. Still B's utterance is not okay in this scenario.

Note that the same is true of Susan's utterance in (B), my own 'translation' of Barker's examples.

(B) Scenario: Only June, Mark and Neville pass the exam and the others don't.

Susan: ?Even Neville passed the exam.

Recall that Neville is the least likely member of the group to pass the exam and that there are two people (Julie and Sebastian), more likely to pass than him, who didn't. Clearly, in such a scenario there are not only two easily accessible S_js (i.e. *June passed the exam* and *Mark passed the exam*) but it also stands to reason that the contradictory of S^* (i.e. *Neville didn't pass the exam*) will be accessible in this context. Still, Susan's utterance isn't felicitous.

In other words, to use language closer in spirit to the philosophers whose work has been discussed in the earlier sections of this chapter than to Relevance Theory, Delgado's requirements that the context must contain at least one S_j and that the contradictory of S^* must be manifest for an *even* utterance to be 'felicitous' (i.e. for it to be processed smoothly along the lines indicated by *even*) are neither jointly sufficient, nor is the latter necessary.

Nevertheless, her account captures at least some of the intuitions about the meaning of *even* and her analysis seems able to deal with most of the standard examples. The question is whether it can be modified to avoid the kinds of problems I have just described.

7.7.3 An alternative RT analysis

It was stated above that Delgado's account captures intuitions about the meaning of *even* adequately. However, she does not accommodate one of the points of agreement mentioned in 7.3, namely the scalarity of *even*. All the other analyses discussed in this chapter see *even* as indicating that S^* is more (or less) something than all (or most) S_js. By contrast, Delgado (much like König, it seems) sees *even* as indicating that S^* is unexpected (because its contradictory is manifest) in absolute terms. My example (55) has shown that this requirement is too strong. I believe that the scalar nature of *even* is the key to a successful analysis.

Taking a leaf out of Fauconnier's (1975) and Kay's (1990)[16] book as far as scalarity is concerned, I would like to suggest that *even* encodes a procedure along the lines in (57).

(57) Process the proposition expressed (S^*) in a context in which it is the strongest on a scale of assumptions that comprises S^* and at least one S_j (different from S^* only in the focussed element).

(58) gives a definition of what it is for a given assumption to be stronger than another.

(58) S^* is the stronger assumption than S_j iff in any situation in which S^* is manifest to degree x, S_j is manifest at least to the same degree, because any evidence for the truth of S^* is also evidence for the truth of S_j (but not vice versa).

This means that a speaker who communicates that the proposition expressed is true, also indicates that any S_js will be true in the same context. On this account, for instance, someone uttering (7) indicates that the proposition expressed, i.e. MAX TRIED ON THE TROUSERS is the strongest on a scale of assumptions so that all other assumptions on the scale will be at least as manifest.

(7) Even Max tried on the trousers.

Since an utterance of (7) actually communicates that Max tried on the trousers, i.e. it indicates that the speaker thinks it is true, it also implies that the speaker believes that any S_js are true. As always, the hearer follows the relevance-theoretic comprehension strategy in accessing the scale of assumptions that is implied by the use of *even*. That is, he will follow a path of least effort in accessing or constructing the scale, stopping when his expectation of relevance has been met. So, which (and how many) S_js the hearer infers depends entirely on what is easily accessible to him. For instance, a hearer who knows that Max went to the clothes shop with Moritz and

[16] For a full discussion of Fauconnier (1975) and Kay (1990) see Iten (forthcoming).

Fritz and that Max hates trying on clothes, so that Max's trying on any garment gives a good indication of Moritz and Fritz also having tried it on, has immediate access to a scale of the sort implied by *even*. Such a hearer will be highly likely to take the speaker as communicating not just that Max tried on the trousers, but also that Moritz and Fritz did. If, on the other hand, the hearer doesn't know anything about Max (or the other two), he is most likely to infer nothing more specific than that there is someone else who tried on the trousers and that Max may not be that likely to try on trousers (or maybe any other garment), because the speaker must have a reason to believe that someone else must have tried on the trousers in any situation in which Max did. In the rest of this sub-section I will show how this analysis can account for the full range of examples. Let me start with my own counterexamples to Delgado's account.

The problem with my first counterexample (55), repeated below, was that the contradictory of the proposition expressed is not available in the context in which B makes her *even* utterance.

(55) scenario: A and B are discussing C's publicly and embarrassingly insisting that Sydney is the capital of Australia.

A: That was a pretty stupid thing to do.
B: Well, even C makes mistakes.

Clearly, my own analysis requires no such thing. *Even* merely indicates that A is to process the proposition expressed by B's utterance, i.e. C MAKES MISTAKES, in a context in which it is the strongest assumption on a scale containing it and at least one other assumption differing from it only in the element in the focus of *even*. In the given scenario, such a context shouldn't be too hard to access for A. Possible other assumptions are A MAKES MISTAKES and B MAKES MISTAKES, for instance. A possible reason for C MAKES MISTAKES being stronger than these other assumptions is that C is the kind of person who always knows everything and strives for perfection, while A and B are more fallible.

The problem my second counterexample, (56), posed for Delgado's account was that all the ingredients needed for smooth processing of B's utterance are there, and yet it isn't felicitous.

(56) scenario: As is mutually known to A and B, Sebastian is unlikely to pass any exam, but Neville is even less likely.

A: A miracle has happened – Neville passed the exam!

B: ?Even Sebastian passed the exam.

On my analysis, B's utterance is predicted to be infelicitous for the following reasons. B's use of *even* indicates that SEBASTIAN PASSED THE EXAM is the strongest on a scale of assumptions, i.e. that any of the other assumptions on the scale will be true whenever it is true. Now, A's utterance makes highly accessible the assumption that Neville passed the exam. That is, A is bound to attempt to access a scale that contains this assumption. However, in this scenario, SEBASTIAN PASSED THE EXAM isn't stronger than NEVILLE PASSED THE EXAM. In other words, the most accessible scale isn't one on which the proposition expressed by B's utterance is the strongest. This shows that my analysis can deal with my own counterexamples to Delgado's account. Let me now turn to how it can deal with (A)-(D).

Let me start by considering (A).

(A) Scenario: Everyone failed the exam, Sebastian and Neville are both more likely to fail than the others and Neville is more likely to fail than Sebastian.

Susan: ?Even Sebastian failed the exam.

In this scenario, Susan's utterance isn't felicitous because a hearer familiar with the facts is most likely to have accessible a scale of assumptions containing not just SEBASTIAN FAILED THE EXAM and NEVILLE FAILED THE EXAM but also AUGUSTA FAILED THE EXAM, JULIE FAILED THE EXAM, ...JUNE FAILED THE EXAM. The problem is that on such a scale SEBASTIAN FAILED THE EXAM is not the strongest assumption. That is, the fact that Sebastian failed the exam may provide evidence for the fact that Neville failed, too, but it doesn't provide evidence for any of the others' failing.

Susan's utterance in (B) is problematic for slightly different reasons.

(B) Scenario: Only June, Mark and Neville pass the exam and the others don't.

Susan: ?Even Neville passed the exam.

The problem here is that any hearer familiar with the group of students in question, will assume that the implied scale contains a set of assumptions ranging from NEVILLE PASSED THE EXAM to JUNE PASSED THE EXAM, including all intermediate possibilities. This is plausible because on the basis of everyone's likelihood of passing exams, in any situation in which Neville passed, everyone else is likely to have passed, too. So, the speaker's communicating that Neville did pass will lead the hearer to conclude that all the others passed, too. However, this is not the case in the given scenario. In other words, Susan will be seriously misleading her hearer by her utterance. This means that my analysis can deal with the examples that have posed problems for 'existential' accounts of *even*. Now, let me demonstrate that it can also handle (C) and (D), which are problematic for 'universal' accounts.

The problem (C) poses for universal accounts is that Susan's utterance is felicitous even though not everyone passed the exam.

(C) Scenario: Everyone except Neville passed the exam.

Susan: Even Sebastian passed the exam.

It should be clear that my own account doesn't require that everyone must have passed the exam for her utterance to be felicitous. All *even* indicates is that SEBASTIAN PASSED THE EXAM is the strongest on a scale of assumptions. Now, a hearer familiar with our group of students would know that NEVILLE PASSED THE EXAM is stronger than SEBASTIAN PASSED THE EXAM, i.e. that in any situation in which the former is true, the latter is likely to be true, too, but not vice versa. I believe that the fact that the speaker chooses to utter something that expresses the weaker of the two propositions will lead the hearer to assume that the speaker is either unable or unwilling to assert the stronger. That is, he is likely to conclude that Neville didn't pass the exam, but that everyone else did. Susan's utterance is acceptable because there is an easily accessible scale of assumptions on which

SEBASTIAN PASSED THE EXAM is the strongest, i.e. one that doesn't contain NEVILLE PASSED THE EXAM.

Finally, Susan's utterance in (D), too, is acceptable although not everyone passed the exam.

(D) Scenario: Everyone passed the exam with the exception of June, who failed for mysterious reasons.

Susan: Even Neville passed the exam.

As mentioned above, I believe that a hearer familiar with the group of students would conclude from Susan's utterance here that everyone passed if Susan didn't overtly qualify her utterance, say, by uttering *however, June failed.* The problem encountered by Lycan is that such a qualification should result in a contradiction, which it clearly doesn't. On my account, a hearer would be likely to conclude that June passed the exam, but this assumption would be merely an implicature that could be cancelled without contradiction. This holds in spite of the fact that the implicature arises as a result of the use of *even*, because *even* doesn't **encode** the implicature itself, but merely **constrains** the context in such a way that a hearer is likely to derive the implicature. The overt qualification simply results in the hearer's changing the accessed scale of assumptions from one that contains JUNE PASSED THE EXAM to one that doesn't. So far, I have, hopefully, shown that my account of the procedure encoded by *even* can deal with the full range of non-conditional examples. It remains to be shown that and how it can explain the properties of *even if*-conditionals.

First, let me consider (4).

(4) Even if you were the last man on earth, I wouldn't marry you.

As always, *even* indicates that the hearer is to process the proposition expressed (IF PETER IS THE LAST MAN ON EARTH, MARY WON'T MARRY PETER) in a context in which it is the strongest assumption on a scale and it's truth implies the truth of all other assumptions on the scale. Now, it's relatively easy to see what weaker assumptions there could be on the scale. It could be anything from IF MARY IS IN

LOVE WITH SOMEONE ELSE, MARY WON'T MARRY PETER to IF MARY CAN'T STAND PETER, SHE WON'T MARRY PETER, etc. However, it is also relatively easy to access a context in which IF PETER ISN'T THE LAST MAN ON EARTH, MARY WON'T MARRY PETER is 'weaker' than the proposition expressed by (4): It's not difficult to imagine a context in which in any situation in which Mary won't marry Peter if he's the last man on earth, she also won't marry him if he isn't the last man on earth. In other words, Mary's utterance of (4) implies that Mary won't marry Peter whether or not he is the last man on earth.

As above, if Jill utters (9) in a scenario in which she is discussing how unreasonably puritanical John's boss is, she won't be taken to imply that John will be fired.

(9) Even if his wife smoked, his boss would fire him.

Again the use of *even* indicates that the proposition expressed (IF JOHN'S WIFE SMOKED JOHN'S BOSS WOULD FIRE JOHN) is the strongest on a scale of assumptions. Now, it isn't very easy to find a context in which IF JOHN'S WIFE DIDN'T SMOKE, JOHN'S BOSS WOULD FIRE JOHN is weaker than the proposition expressed. That is, it isn't plausible that in any situation in which Joan fires John if his wife smokes, she would also fire him if his wife didn't smoke. Instead, the range of weaker assumptions available in this context will contain assumptions such as IF JOHN SMOKED, HIS BOSS WOULD FIRE HIM and IF JOHN DRANK, HIS BOSS WOULD FIRE HIM. In other words, the fact that Jill asserts that John's boss would fire him if his wife smoked doesn't mean that she also implies that John's boss would fire him if his wife didn't smoke and her hearer will not be justified to take her to be communicating that John will be fired.

In this sub-section I have proposed a procedural analysis of the meaning of *even*, which takes its cue from the scalar accounts of Fauconnier (1975) and Kay (1990) but is cast in relevance-theoretic terms. I hope to have demonstrated that this analysis can account for the full range of examples involving *even* on its own and when combined with *if*.

7.8 Procedural meaning revisited

I said in 4.3.2 that it would only be possible to make more precise observations about the nature of procedural meaning once a number of expressions with procedural meaning had been analysed. In the last three chapters I have proposed procedural accounts of three different linguistic expressions: *but*, *although* and *even*. The three procedures are repeated in (59)-(61).

(59) *but*

Process what follows (i.e. *Q*) as a denial of an accessible assumption.

(60) *although*

Suspend an inference from what follows (i.e. *P*) which results in an unresolvable contradiction.

(61) *even*

Process the proposition expressed (*S**) in a context in which it is the strongest on a scale of assumptions that comprises *S** and at least one S_j (different from *S** only in the focused element).

It should now be possible to say a little bit more about the nature of procedural meaning by comparing the procedures I have suggested for these three expressions.

It seem relatively easy to see what the procedures encoded by *but* and *although* have in common. Both of these procedures essentially indicate what inferential path the speaker intends the hearer to take in deriving the **implicatures** of the utterance. That is, it is clear that *but* and *although* both affect the implicit side of communication.

Even, on the other hand, seems slightly different. Rather than indicating to the hearer which inferential path the speaker intends her to take, *even* indicates the nature and range of assumptions in the context of which the speaker intends the hearer to process her utterance. It is at least possible that this constraint on contextual assumptions not only affects the inferential processes involved in the derivation of **implicatures**, but also those involved in deriving **explicatures**. Indeed, this meshes well with the observation made in 4.6.7 and 7.6.2 that *even* seems

capable of making a difference to the proposition expressed by an utterance containing it, at least in some circumstances.

Summing up, the analyses given in the last three chapters point towards the existence of two distinct types of procedural meaning: There are procedures that highlight an inferential path and there are procedures that highlight contextual assumptions. Of course, inferential paths and contextual assumptions don't exist independently of each other. Pursuing a particular inferential path will necessarily involve accessing a certain range of contextual assumptions, and accessing a particular range of contextual assumptions will allow an individual to pursue certain inferential paths, but not others. In other words, what both types of procedures have in common, as predicted by Blakemore, is that they constrain the inferential processes involved in deriving the intended interpretation of an utterance, thus saving the hearer the unnecessary processing effort of going down an inferential path not intended by the speaker. *But* and *although* constrain these inferential processes directly by indicating a particular inferential route, while *even* places an indirect constraint on inference by making accessible certain contextual assumptions above any others. It will be interesting to see in future research whether all procedural meaning falls into one of these two categories.

CHAPTER 8
FINAL REMARKS ON CONCESSIVITY AND ON TRUTH CONDITIONS

8.1 Looking back

There are two main strands to this thesis: (a) 'non-truth-conditional' linguistic meaning and the question of the relationship between truth conditions and linguistic semantics, and (b) 'concessivity'. The first four chapters were devoted to (a), while the last three dealt with three members of the sub-class of 'concessive' 'non-truth-conditional' linguistic devices: *but*, *although* and *even if*. In this final chapter, I will consider some residual issues concerning each one of these strands in turn, starting with 'concessivity'.

8.2 'Concessive' interpretations and ways of achieving them

8.2.1 What makes an interpretation 'concessive'?

At the beginning of chapter 5 I argued that not much can be gained by first attempting to define a notion of concession or a concessive interpretation and then trying to analyse the meaning of certain expressions, such as *but*, *although* and *even if*, on the basis of that definition. Instead, I argued, one should start by analysing the linguistic meaning of such expressions and then see if there are any significant generalisations to be made. In the last three chapters, I have looked at various accounts of the meanings of *but*, *although* and *even if* and I've suggested my own relevance-theoretic analysis for each of them. Now the question is whether there are any interesting generalisations to be made about 'concessive' interpretations, or the notion of concession, in general.

It was shown in 5.1 that for Quirk et al. (1972) concession is all about the denial of an expectation, i.e. in an example like (1) the truth of the second clause is unexpected in the light of that of the first.

(1) It was raining but Peter went out.

Other theorists have defined the notion of concession along similar lines. As indicated in 5.1, most coherence theorists define a relation of concession, which they take to hold between two discourse segments. For instance, according to Mann & Thompson (1986: 65), the concession relation

> arises when a speaker acknowledges, in one part of the text, the truth of a point which potentially detracts from a point in another part of the text.[1]

Hovy & Maier (1994: 10) define their own concession relation in terms of denial of expectation. According to them, two discourse segments stand in a concession relation to each other if "one of the text segments raises expectations which are contradicted/violated by the other". Finally, Oversteegen's (1997: 63) definition of the concession relation is based on Anscombre & Ducrot's (1977) account of denial *but*. That is, according to her, two clauses are related by concession just in case from the first clause *not-R* can be inferred and *R* can be inferred from the second clause.

Rudolph (1996) defines the kind of relation marked by *but*, *although* and *even if* in terms compatible with the definitions mentioned so far. According to her, these connectives can all mark contrast (she calls co-ordinate contrastive structures 'adversative' and subordinate ones 'concessive'). She (1996: 31) defines contrast as involving the simultaneous validity of two propositions and a broken off causal chain. For instance, in (1) *it was raining* and *Peter went out* are simultaneously valid and there is a broken off causal chain from *it was raining* to *Peter didn't go out.* However, the broken-off causal chain doesn't have to be between the first proposition and the negation of the second. It can equally well exist between the first proposition and any other plausible proposition. Rudolph (1996: 31) symbolises this definition of contrast as in (2), where *A* and *B* are the two propositions that hold simultaneously and the broken line indicates the broken-off causal chain linking *A* and *C*.

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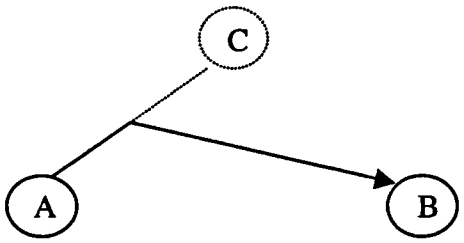
[1] A bit later, Mann & Thompson (1988: 254) redefine the concession relation in somewhat more complicated and less intuitive terms. However, for the present discussion their earlier definition is sufficient.

(2)



All of these definitions of 'concession' seem to have one feature in common, i.e. they all see it as involving the denial of some expectation raised by earlier discourse[2]. Now, I hope to have shown in the last three chapters that *but* can be interpreted as indicating denial of expectation in some, but crucially not all, instances, while *although* and *even if* are better analysed in slightly different ways. Therefore, 'concession' on the definitions just discussed doesn't capture the linguistic meaning of any of these expressions.

However, there is something shared by *but*, *although* and *even if*. They all have meaning that in some way involves the idea of negation or denial. In the case of *but* the denial is straightforward, i.e. denial is what *but* signals. In the case of *although*, the denial is indirect, i.e. *although* indicates that the hearer is to suspend an inference, and this suspension could be seen as resulting in the denial of the assumption that would have been the outcome had the inference gone through. Finally, an *even if* utterance could be seen as involving denial in the sense that the consequent clause expresses a proposition one would not expect to hold in a situation in which the antecedent holds. For instance, before encountering an utterance of (3), a hearer may well expect that the speaker would pass the exam in a situation in which she studied all night. However, the conditional indicates that the speaker believes that she will fail the exam in any situation in which she studies all night, which denies this expectation.

(3) Even if I studied all night, I'd fail the exam.

This example highlights an interesting and important difference between *but* and *although*, on the one hand, and *even if*, on the other. In the case of the former, where

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[2] Rudolph's breaking off of a causal chain can easily be reinterpreted as a denial of expectation: If a speaker holds a causal background assumption along the lines of *A causes C*, then her uttering *A but B*, will indicate that she believes that *B* denies the expectation of *C* created by *A*.

there are two clauses, one of them could be seen as (directly or indirectly) denying an implication of the other. In the latter, on the other hand, the combination of the two clauses denies an assumption that links the antecedent with the negation of the consequent. In all three cases, however, two assumptions are presented as holding at the same time against a background of assumptions that would justify the expectation that only one of them holds. If there is such a thing as a 'concession' relation, or a 'concessive interpretation', then I think it's something like this: The speaker is (explicitly) communicating the simultaneous truth of two assumptions along with a contextual assumption that would justify the conclusion that only one of the explicitly communicated assumptions can hold at any one time.

8.2.2 Communicating concessivity without encoding it

The question I want to ask in this section is under what circumstances a speaker can achieve such a 'concessive' interpretation without using linguistic devices, such as *although*, *but* or *even if*, whose encoded meaning guides the hearer along this sort of inferential path. The obvious ingredients seem to be a combination of two communicated assumptions and a context in which an assumption is easily accessible that means that the two communicated assumptions shouldn't really co-exist. I believe that this last requirement is hard to meet. First, an assumption that means *P* and *Q* aren't likely to be true together ought to be of the form *if P then not-Q* or *if Q then not-P* or, more strongly, *because P, not-Q* or *because Q, not P*. Now, there aren't many assumptions of this form that are held so strongly that an assertion of *P and Q* wouldn't lead one to abandon them. For instance, say I believe that John always wears green socks on Wednesday and you utter (4).

(4) It's Wednesday and John is wearing red socks.

In this scenario your utterance will make me question my assumption concerning John's sock-wearing habits and I'm very likely to either abandon it completely or hold it less strongly as a result of your utterance. However, if you'd uttered (5) instead, I would be inclined to hold on to my assumption that John wears green socks on Wednesdays because your use of *although* indicates that I am to suspend the inference from *it's Wednesday* to *John is wearing green socks*, which also indicates

that you believe the inference (and the assumption that licenses it) to be valid in general.

(5) Although it's Wednesday, John is wearing red socks.

The only types of assumption of the form *if P then not-Q* or *because P, not-Q* that are likely to survive an assertion of *P and Q* are those where there is either a strong real-world causal connection between *P* and *not-Q* or where there is a strongly held belief that *P* leads to the conclusion *not-Q*. For instance, for most people there is a real-world causal connection between a glass falling from a height of more than a few centimetres and it breaking. For this reason, I believe that the *and*-conjunction in (6) can be given a roughly 'concessive' interpretation.

(6) The glass fell off the table and it didn't break.

Similarly, in Western cultures it's a widely held belief that someone's not being an employee of a company is a very good reason for them not having a key to the company safe. For this reason, (7) can be interpreted 'concessively'.

(7) Peter isn't an employee of the bank and he has a key to the safe.

Note, however, that in both these cases, but particularly in (7), stress and intonation play a crucial role in getting across a 'concessive' interpretation. Quite generally, it seems that to ensure that a hearer interprets an utterance 'concessively', speakers must mark this in some way. In this, 'concessivity' differs in an interesting way from causality. For instance, the conjunction in (8) receives a causal interpretation as readily as (9), where the causal connection is linguistically encoded by *because*.

(8) Peter fell off his bike and broke an arm.
(9) Because Peter fell off his bike, he broke an arm.

The connectives discussed in the last three chapters all encode 'concessivity' by indicating actual or potential denial or contradiction. However, another way of doing it is to stress the fact that an assumption continues to hold in circumstances in which

one might not expect it to do so. The use of *still* in utterances like (10) and *yet* in (9) may be explained in this way.

(10) It was raining. Peter still went out.
(11) It was raining. Yet Peter went out.

Utterances with a structure like (12) are also standardly used to convey concession.

(12) Much as I like teaching, I'm always glad when term is over.

I believe that such examples, due to their scalar nature, not only share something with *but* and *although* utterances, but also with those involving *even if.* For instance, (12) could be glossed as any of (13a)-(c).

(13) a. I like teaching very much, but I'm always glad when term is over.
b. Although I like teaching very much, I'm always glad when term is over.
c. I'm always glad when term is over although I like teaching very much.

In other words, the speaker conveys the two assumptions that she likes teaching to a great degree and that she is always glad when term is over. Furthermore, there is an implication that if she liked teaching to degree x, where x is smaller than the extent to which she actually likes teaching, then she would also always be glad when term is over, or maybe that anybody who likes teaching less than she does is (more) likely to be glad when term is over.

Finally, non-restrictive relative clauses, such as those in (14) and (15). can also sometimes receive broadly 'concessive' interpretations.

(14) The glass, which fell off the table, didn't break.
(15) Peter, who isn't an employee of the bank, has a key to the safe.

Here, just as in the conjoined examples (6) and (7), the speaker (explicitly) communicates two assumptions against the background of a third assumption which

means that the two assumptions communicated shouldn't really both be true. Interestingly, it is slightly easier to get a concessive interpretation with these examples than it is with their conjunctive counterparts (6) and (7). Nevertheless, even in the case of this type of construction, 'concessivity' must be encoded (or marked in some other way, e.g. by stress or intonation) if the speaker wants to make sure that the intended (concessive) interpretation is accessed. As with *and*-conjunction, it seems that a causal connection between the relative clause and the main clause will be inferred wherever possible. This is shown particularly clearly by the examples in (16) and (17), where, in each, case the event described in the relative clause is understood as the reason for the event in the main clause, even though there is nothing in the events described that precludes a 'concessive' reading.

(16) Peter, who had seen John wearing a red shirt, asked his mother to buy him one.

(17) Peter, who had seen John wearing a red shirt, asked his mother not to buy him one.

That is, nothing precludes the possibility that Peter might ask his mother to buy him a red shirt in spite of the fact that he had seen John wearing one. It is also possible that Peter might ask his mother **not** to buy him a red shirt in spite of having seen John wearing one. It seems, then, that a speaker who intends her utterance to be interpreted 'concessively' would do well to encode this. Causality, on the other hand, seems to be easily inferrable. Why is this?

I believe that there are two factors that could explain this difference. First, as mentioned in 7.6.2, assumptions concerning causal connections are very valuable to cognitive systems, i.e. they achieve a high number of cognitive effects. Therefore, causal interpretations always have a good chance of being optimally relevant, particularly, since they also tend to be highly accessible. Second, 'concessivity' is a complex inferential relation between assumptions that doesn't exist in the real world. In other words, it is likely to be far less accessible than, say, a causal connection on any given occasion. Thus, it isn't very surprising that hearers hardly ever recover 'concessive' interpretations unless the speaker has used a means of indicating that this is what she intended.

8.3 (Not quite) the last word on truth conditions

8.3.1 What are 'the truth conditions' of the utterance?

In section 4.5.2 I discussed the idea that for each simple utterance there is a single proposition that has to be true for the utterance to be judged true and that this truth condition of the utterance is the core of its meaning. In doing this, I also noted that, as theorists but, presumably, also as ordinary speakers and hearers, we should trust our intuitions when it comes to deciding what the truth conditions of a particular utterance are. This approach is made particularly explicit in Recanati's (1993: 246-250) Availability Principle. According to this principle,

> In deciding whether a pragmatically determined aspect of utterance meaning is part of what is said, that is, in making a decision concerning what is said, we should always try to preserve our pre-theoretic intuitions on the matter.[3]
>
> (Recanati 1993: 248)

The problem with this is that in many cases our intuitions are far from clear. For instance, there is a fair amount of disagreement among theorists, but also among ordinary speakers and hearers, as to whether or not utterances of (18) and (19) are true in the indicated scenarios.

(18) The man drinking a martini is a famous philosopher. [where the man indicated is indeed a famous philosopher but isn't drinking a martini]

(after Donnellan 1966/1977: 48)

(19) Napoleon, who recognised the danger to his right flank, personally led his guards against the enemy position. [where Napoleon didn't recognise the danger to his left flank, though he did lead his guards]

(Frege 1892: 44)

Since intuitions are not always straightforwardly clear, it is standard practice in RT to use what has been termed the 'scope test' to sharpen intuitions. Indeed, relevance-theorists have generally relied on this test, where Recanati has used his Availability

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[3] Note that, for Recanati, 'what is said by the utterance' = 'the truth-conditional content of the utterance'

Principle[4]. Recall that the scope test involves the embedding of the utterance in question in the scope of a logical operator, such as *if...then* or *or*, or, alternatively, under the scope of a causal connective, such as *because*. The idea is that a given aspect of meaning is part of the truth-conditional content of the utterance (the proposition expressed, or Recanati's what is said), if it falls under the scope of the operator. For instance, *it was raining* is part of the truth-conditional content of (20), because it falls under the scope of *because* in (21), and *if* in (22). In the former, it is understood to be part of the cause of Peter's getting wet, while, in the latter, it is part of the circumstances in which Peter will have got wet. As seen in 6.1, *although* doesn't fall in the scope of either of these operators and is, therefore, 'non-truth-conditional'.

(20) Peter went out although it was raining.

(21) Because Peter went out although it was raining, he got wet.

(22) If Peter went out although it was raining, he'll have got wet.

Apart from the difficulties discussed in 7.6.2, the problem with the scope test is that not all utterances can be embedded under a logical operator with grammatical results (see Ifantidou 1994: 140-141). Furthermore, even in cases where an embedding yields grammatical results, the resulting intuitions in many instances are far from clear. Finally, for cases like (18) and (19) the scope test gives a clear result, which is, however, different from many people's intuitions regarding the unembedded utterances. For instance, many people would say that someone uttering (18) in a scenario in which the man referred to is a famous philosopher but only looks as if he is drinking a martini has said something true and something false. However, when this utterance is embedded as in (23), the definite description doesn't seem to fall under the scope of *because*.

(23) a. Because the man drinking a martini is a famous philosopher, you should treat him with respect.

b. Because the man drinking a martini is a famous philosopher, he doesn't need another drink yet.

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[4] For a detailed discussion of the Availability Principle, the scope test and related matters, see Carston

In other words, someone uttering (23a) is saying that the reason the hearer should treat a certain person with respect is that he is a famous philosopher – the fact that he is drinking a martini doesn't enter into the picture. (23b) shows that, even if the embedding is set up in such a way that the man's drinking a martini is potentially important, it doesn't come across as being in the scope of *because*. That is, here the man's drinking a martini might well be a reason for his not needing another drink yet, but an utterance of (23b) still conveys that the reason for his not needing another drink yet is that he is a famous philosopher.

Similarly, there is a widespread intuition[5] that someone who utters (19) in a scenario in which Napoleon didn't recognise the danger to his right flank (but he did personally lead his guards against the enemy position) has said something true and something false at the same time. Again, if one embeds this utterance as in (24), the non-restrictive relative clause doesn't seem to fall in the scope of *because*.

(24) a. Because Napoleon, who recognised the danger to his right flank, personally led his guards against the enemy position, he won the battle.

b. Because Napoleon, who recognised the danger to his right flank, personally led his guards against the enemy position, I believe that he was as vigilant as ever.

That is, in both (24a) and (24b) the reason for the state of affairs described in the main clause is understood to be that Napoleon personally led his guards against the enemy position. The fact that he recognised the danger to his right flank doesn't enter the picture even in (24b), where the main clause has been chosen so as to make it more likely that his recognition of the danger is part of the reason for the speaker's belief that Napoleon was as vigilant as ever.

In recent literature it has been suggested, e.g. by Neale (1999) and Bach (1999), that the fact that people's intuitions in these cases vary so much can be explained if one drops the assumption that examples like those above express one

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(1998, chapter 3; forthcoming b, chapter 3).

[5] Neale (1999: 56) and Bach (1999: 345) both note that intuitions on the truth conditions of such utterances vary greatly. More will be said about their approaches below.

and only one proposition. Instead, these philosophers argue, such utterances express two or more propositions, each of which comes with its own truth condition. Crucially, the idea is not that such utterances express the **conjunction** of all these propositions. On this picture, not all the propositions expressed by an utterance are equally important and which one is the most important on a given occasion is determined by contextual factors. Bach and Neale maintain that people will agree that an utterance can be true in case only one proposition is true and the others are false only when they are forced to decide whether the whole utterance is true or false. In such a case, the utterance will be judged true just in case the most important proposition expressed is true.

The idea that what seems to be a single utterance (and, in some cases, even a single sentence) can express multiple propositions meshes well with my own observations in 6.4.2, where I argued that utterances of the form *Q although P* and *although P, Q* express three propositions: *Q*, *P* and *Q sub P*, where *sub* is doing duty for any subordinating conjunction. But how does the idea that utterances can express multiple propositions mesh with the scope test (and the notion of 'the truth conditions of the utterance')?

It seems that the scope test does a reasonably good job of pinpointing the most important proposition expressed. However, operators such as *if...then, or* and *because* can only take single propositions in their scope – (25), which constitutes an attempt at embedding two non-conjoined propositions in the scope of *because*, is ungrammatical.

(25) *Because Peter went out. It was raining, he got wet.

Because, according to Bach and Neale, utterances like (18) and (19) express multiple propositions (rather than a single conjunctive proposition), the scope test is not a suitable tool for determining whether a given assumption is a proposition expressed by such utterances or an implicature – *if, or* and *because* can only ever take scope over a single proposition. So, if Bach and Neale are right, and simple utterances can express multiple propositions, then it is no longer true that a given aspect of meaning is part of the (or a!) proposition expressed by an utterance just in case it falls in the scope of *if, or* or *because* when the utterance is embedded under one of these operators. This means that a different method for deciding which communicated

assumptions are propositions expressed and which implicatures must be found. Having such a method is particularly important for semantic and pragmatic accounts that rely on the notion of 'the truth conditions of the utterance', which, in the case of multiple proposition utterances, would presumably amount to the truth conditions of the totality of propositions expressed.

It seems, then, that the notion of 'the truth conditions of the utterance', whether what is meant by this is the truth conditions of a single proposition expressed by the utterance or whether it is the truth conditions of the totality of propositions expressed, is problematic. Therefore, any account of utterance meaning and interpretation that doesn't rely on this notion must be at an advantage. So, what role, if any, does it play in the framework of Relevance Theory? This is the question I want to consider in the next sub-section.

8.2.2 Doing without 'the truth conditions of the utterance'

Let me start by looking at what truth conditions have been used for in accounting for utterance meaning in RT. The main question a theory of utterance interpretation must answer surely is 'how does the hearer recover what the speaker intended to communicate by uttering what she did in the particular circumstances in which she made her utterance?'. In other words, in RT terms, what is crucial is the content of the speaker's communicative intention, i.e. the set of assumptions she intends to make manifest or more manifest by her utterance. Clearly, this includes the whole range of communicated assumptions comprising explicatures and implicatures alike. As discussed in 4.5, all of these assumptions, which are entertained as mental representations, can be given truth conditions. Now, from a hearer's point of view it may well not matter all that much whether a given assumption has been communicated explicitly or implicitly (i.e. whether it is an explicature or an implicature of the speaker's utterance). Certainly, as far as recall is concerned it doesn't: Impressionistically, people remember the main import of an utterance, i.e. those implications it has that achieve the greatest number of contextual effects, but they don't, on the whole, remember what the speaker 'said', i.e. which of the communicated assumptions were explicatures. Indeed, it would be interesting to check this impression in empirical research, maybe along with the hypothesis that people might judge that a speaker may not have been truthful, even though the

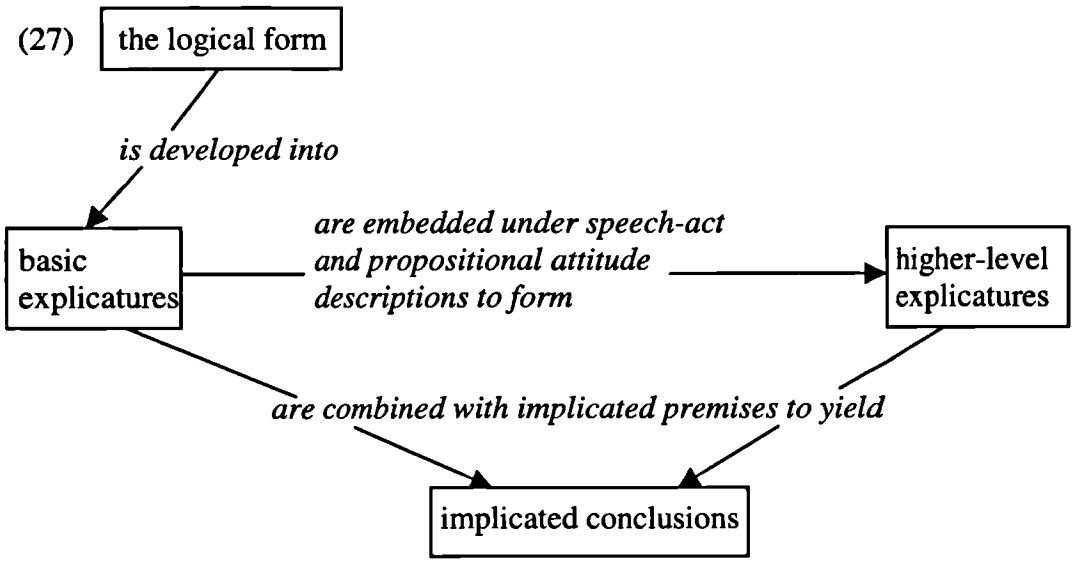
alleged 'truth-conditional content' of the utterance was true, if it turns out that an assumption strongly implicated by the speaker was false. For instance, I believe that most hearers of Mary's utterance in the scenario in (26) would at least feel that they had been misled, if not lied to, if it turned out that she had no intention of posting John's letter.

(26) John: This letter urgently needs posting and I don't have a minute to do it.
Mary: I've got to go to the post office anyway.

Clearly, this isn't an explicature of Mary's utterance, but it certainly is a very strong implicature. This shows that ordinary speakers and hearers may well not distinguish between explicit and implicit communicated assumptions when making judgements about the truth or falsity of utterances.

However, from the theorist's point of view, there is an interesting and important distinction to be made between the explicatures and the implicatures of a linguistic utterance. This is particularly true in the framework of Relevance Theory, where the linguistically encoded content of an utterance, i.e. its logical form, is seen as the (sub-propositional) input to a number of inferential processes, constrained by the hearer's (unconscious) search for optimal relevance, which result in the recovery of the set of communicated assumptions. Although there may be (and, I suspect, often is) a process of mutual adjustment[6] and fine-tuning between explicatures and implicatures, the finished picture, as it were, has to look as in (27).

[6] See Sperber & Wilson (1998: 193-194) and Wilson & Sperber (forthcoming: 19)



In other words, basic explicatures (i.e. communicated propositions expressed) depend on the logical form, higher-level explicatures depend on basic explicatures and neither implicated premises nor implicated conclusions can be derived without explicatures. This means that there is an important difference between explicatures and implicatures (i.e. implicated premises and conclusions): While the former are developments of the logical form(s) encoded by the utterance and always function as 'premises' or input to inferential processes that lead to further communicated assumptions, the latter are not developments of the logical form(s) and only some of them function as premises. The diagram in (27) also shows that the notion of 'the truth conditions of the utterance' plays no role at all on the RT view of utterance interpretation. So, why is this notion retained in the theory?

As far as I am aware, the only purpose for which relevance theorists have occasionally relied on intuitions about 'the truth conditions of the utterance' is when it comes to deciding whether a given aspect of the meaning of an utterance is communicated explicitly or implicitly. For instance, the fact that (28a) and (b) seem to differ in what it takes for them to be judged true (where (28a) corresponds to (29a) and (28b) to (29b)) can be used as an argument in favour of (29a) and (b) being communicated explicitly by utterances of (28a) and (b) respectively, rather than being implicatures of these utterances[7].

[7] Note, however, that the scope test is incapable of distinguishing between implicatures and higher-level explicatures, because the latter don't fall in the scope of logical or causal operators either. For instance, the reason for not talking to Peter given by a speaker uttering *Because Peter is frankly a*

(28) a. Joan dropped the teapot and Mary screamed.

b. Mary screamed and Joan dropped the teapot.

(29) a. Joan dropped the teapot and, as a consequence, Mary screamed.

b. Mary screamed and, as a consequence, Joan dropped the teapot.

So, the question is whether there is a way of showing that the causal connection between the two conjuncts in such examples is part of what is communicated explicitly that doesn't make use of the notion of 'the truth conditions of the utterance'. I believe that there is, and I will briefly discuss some of the possibilities in what follows.

One possibility is connected with the RT definition of explicatures as communicated assumptions that are developments of a logical form encoded by the utterance. I am assuming that there are ways of determining what a given utterance encodes. So, if there were a clear-cut way of distinguishing what is a "development" of a logical form from what isn't, there would also be a way of determining whether or not a given aspect of utterance meaning has been conveyed explicitly. However, the notion of "development" is notoriously difficult to pin down. Still, it is at least possible to decide whether or not a given assumption is likely to be a development of an encoded logical form. This plays an important part in the second option I want to consider.

This option is connected with the difference in the role played by explicatures and implicatures. In particular, the important point is that the explicatures of an utterance have to play a role, i.e. act as premises, in the process of deriving implicated conclusions[8]. This requirement follows straightforwardly from the definition of relevance (in absolute terms). Recall that any stimulus is relevant if and only if it yields at least one contextual effect and that contextual effects are achieved only if new information **interacts** with given information. Now, in the case of a linguistic utterance this new information can only be an explicature – implicated premises are assumptions already manifest to the hearer and implicated conclusions never derive just from implicated premises (if they did, they, too, would already be

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bore, I'm not talking to him is that Peter is a bore, and not that the speaker is telling the hearer frankly that Peter is a bore.

[8] This option was first explored by Carston (1988: 157-158).

manifest to the hearer). So, it is the explicatures of an utterance that have to interact with old information to yield contextual effects if the utterance is to achieve relevance. This means that the theorist can work out (post hoc) whether or not a given aspect of meaning is communicated explicitly. I will demonstrate how this can be done using an example.

For instance, imagine Jack uttered (28a) in a conversation about Mary's attitude to her crockery (people do talk about some strange things...).

(28) a. Joan dropped the teapot and Mary screamed.

Let's assume (not unreasonably, I think) that Jack thus communicates assumptions along the lines of (29a) and (30).

(29) a. Joan dropped the teapot and, as a consequence, Mary screamed.

(30) Mary is extremely attached to her crockery.

Now, obviously, the question is whether (29a) is an explicature or an implicature of Jack's utterance (assuming, of course, that he intended to communicate it). I believe that a reconstruction of how the hearer, say Jim, works out that Jack intends to communicate the assumptions mentioned above can shed light on this question.

Let me start with how I believe Jim is likely to arrive at the assumption in (30). It seems clear that, to warrant a conclusion such as this, what is needed is a premise of the form *if P then x is extremely attached to their crockery*. Now, what is *P* likely to be here? Quite conceivably it could be something like *x screams as a consequence of their crockery being dropped* so that (31) is one of the many implicated premises Jim has to access in order to derive the implicated conclusion in (30)[9].

(31) If *x* screams as a consequence of *y* dropping *x*'s crockery, then *x* is extremely fond of her crockery.

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[9] There is no question as to the implicit status of this assumption: It's simply impossible to envisage how *Mary is extremely fond of her crockery* could be a development of the logical form encoded by *Joan dropped the teapot and Mary screamed.*

This shows that the assumption in (29a), which expresses a causal connection between Joan's dropping the teapot and Mary's screaming, plays an important role in the derivation of the implicature in (30) – without the causal connection this conclusion couldn't be reached. It also shows that the only other alternative candidate for the (basic) explicature of Jack's utterance of (28a), i.e. the simple assumption that Joan's dropping the teapot and Mary's screaming both happened, doesn't play a role in the derivation of the implicature in (30) at all. In fact, it's not even clear that the simple conjunction is communicated in this scenario. In other words, there is every reason to believe that (29a) is an explicature of Jack's utterance in (28a). This conclusion is supported further by the fact that it is relatively easy to see how something like (29a) could be a development of a logical form encoded by (28a).

Summing up, it seems that a communicated assumption is likely to be an explicature of a given utterance just in case it can conceivably be a development of a logical form encoded by the utterance and it plays a crucial role in the derivation of further communicated assumptions. In other words, the notion of 'the truth conditions of the utterance' isn't needed in RT at all. At this point I should stress that all of the above discussion merely concerns a heuristic for the theorist to determine whether or not an assumption is likely to be an explicature. As far as actual hearers are concerned, they simply follow the relevance-theoretic comprehension strategy of accessing interpretive hypotheses (at every level) in order of accessibility and stopping when their expectations of relevance have been met. On the whole, hearers don't need to know, and probably don't care, whether a given assumption they believe the speaker has communicated is an explicature or an implicature and they certainly don't need to know what 'the truth conditions of the utterance' are in order to understand it.

8.4 Looking forward

I started this thesis by arguing against truth-conditional approaches to linguistic semantics, i.e. against the idea that there is such a thing as 'the truth conditions of the sentence', and ended it by arguing that the notion of 'the truth conditions of the utterance' serves no useful purpose in a cognitive theory of utterance interpretation.

In between, I have discussed a number of linguistic expressions whose meaning couldn't be accounted for in truth-conditional terms, even if such an approach to linguistic semantics were viable. Although there is no useful distinction to be drawn between 'truth-conditional' and 'non-truth-conditional' meaning, I have argued that there are two fundamentally different types of linguistic meaning: conceptual and procedural. In chapters 5, 6 and 7, I have proposed procedural analyses of *but*, *although* and *even*, and, at the end of chapter 7, I have made some observations concerning procedural meaning in general.

Future research will show if these generalisations hold beyond the expressions discussed in this thesis. It will be particularly interesting to investigate how the natural language equivalents of the logical operators ¬, &, *v*, and →, namely *not*, *and*, *or* and *if...then* fit into this conceptual/procedural framework. Furthermore, there are some important questions regarding the syntax-semantics interface level of logical form, e.g. how to determine how many logical forms an utterance encodes, or, indeed, what exactly constitutes an utterance or processing unit for the relevance-theoretic comprehension strategy. Finally, as shown in the last three chapters, *but*, *although* and *even* constrain the inferential processes that result in the recovery of **implicatures**. It seems worth investigating further the nature of the procedural meaning encoded by pronouns (and, conceivably, illocutionary and attitudinal particles) which constrains the inferential processes that lead from the logical form(s) of an utterance to its **explicatures**. Studying the similarities and differences between these two 'functionally' different kinds of procedural meaning will ultimately deepen our understanding of procedural encoding in general and its role in utterance processing.

BIBLIOGRAPHY

Abraham, W. 1979. *But. Studia Linguistica* 33: 89-119.

Almog, J., H. Wettstein & J. Perry (eds.).1989. *Themes from Kaplan.* New York: Oxford University Press.

Anscombre, J.-C. & O. Ducrot. 1976. L'argumentation dans la langue. *Langages* 42: 5-27.

Anscombre, J.-C. & O. Ducrot. 1977. Deux *mais* en français? *Lingua* 43: 23-40.

Anscombre, J.-C. & O. Ducrot. 1983. *L'argumentation dans la langue.* Brussels: Pierre Mardaga.

Anscombre, J.-C. & O. Ducrot. 1986. Argumentativité et informativité. In M. Meyer (ed.). *De la métaphysique á la rhétorique.* Brussels: Mardaga.

Anscombre, J.-C. & O. Ducrot. 1989. Argumentativity and informativity. In M. Meyer (ed.). *From Metaphysics to Rhetoric.* Dordrecht: Kluwer Academic Publishers. 71-87. English translation of A & D (1986).

Atlas, J. 1984. Comparative adjectives and adverbials of degree: An introduction to radically radical pragmatics. *Linguistics and Philosophy* 7: 347-377.

Atlas, J. D. 1989. *Philosophy without Ambiguity: A Logico-Linguistic Essay.* Oxford: Clarendon Press.

Austin, J. L. 1962. *How To Do Things With Words.* Oxford: OUP.

Bach, K. & R. M. Harnish. 1979. *Linguistic Communication and Speech Acts.* Cambridge, Mass.: MIT Press.

Bach, K. 1987. *Thought and Reference.* Oxford: Clarendon Press.

Bach, K. 1994. Conversational impliciture. *Mind and Language* 9: 124- 162.

Bach, K. 1999. The myth of conventional implicature. *Linguistics and Philosophy* 22: 327-366.

Barker, S. 1991. *Even, still* and counterfactuals. *Linguistics and Philosophy* 14: 1-38.

Barker, S. 1994. The consequent-entailment problem for *even if. Linguistics and Philosophy* 17: 248-260.

Bell, D. M. 1998. Cancellative discourse markers: A core/periphery approach. *Pragmatics* 8.4: 515-541.

Bennett, J. 1982. *Even if. Linguistics and Philosophy* 5: 403-418.

Berckmans, P. 1993. The quantifier theory of *even*. *Linguistics and Philosophy* 16: 589-611.

Berlin, I. et al. (eds.). 1973. *Essays on J. L. Austin.* Oxford: Clarendon Press.

Blakemore, D. 1987. *Semantic Constraints on Relevance.* Oxford: Blackwell.

Blakemore, D. 1989. Denial and contrast: a Relevance Theoretic account of *but. Linguistics and Philosophy* 12: 15-37.

Blakemore, D. 1997. On non-truth conditional meaning. *Linguistische Berichte. Sonderheft* 8: 82-102.

Blakemore, D. 2000. Indicators and procedures: *nevertheless* and *but. Journal of Linguistics*

Burge, T. 1974. Demonstrative constructions, reference, and truth. *The Journal of Philosophy* 71: 205-223.

Carston, R. 1988. Implicature, explicature, and truth-theoretic semantics. In Kempson (1988). 155-181.

Carston, R. 1996a. Enrichment and loosening: complementary processes in deriving the proposition expressed? *UCL Working Papers in Linguistics* 8: 61-88. Reprinted 1997 in *Linguistische Berichte. Sonderheft* 8: 103-127.

Carston, R. 1996b. Metalinguistic negation and echoic use. *Journal of Pragmatics* 25: 309-330.

Carston, R. 1998. *Pragmatics and the Explicit-Implicit Distinction.* University of London PhD thesis.

Carston, R. 1999a. The semantics/pragmatics distinction: A view from Relevance Theory. In Turner, K. (ed.). *The Semantics-Pragmatics Interface from Different Points of View.* 85-125. Oxford: Elsevier.

Carston, R. 1999b. Negation, 'presupposition' and metarepresentation: a response to Noel Burton-Roberts. *Journal of Linguistics* 35: 365-389.

Carston, R. forthcoming a. Explicature and semantics. In Davis, S. & B. Gillon (eds.). *Semantics: A Reader.* Oxford: OUP.

Carston, R. forthcoming b. *Thoughts and Utterances: The Pragmatics of Explicit Communication.* Oxford: Blackwell.

Carston, R. & C. Iten. forthcoming. The myth of 'what is said'.

Clark, W. 1991. *Relevance Theory and the Semantics of Non-Declaratives.* University of London PhD thesis.

Dascal, M. & T. Katriel. 1977. Between semantics and pragmatics: The two types of 'but' – Hebrew 'aval' and 'ela'. *Theoretical Linguistics* 4: 143-172.

Davidson, D. 1967. Truth and meaning. *Synthèse* 17: 304-323. Reprinted in Davidson (1984). 17-36.

Davidson, D. 1984. *Inquiries into Truth & Interpretation.* Oxford: Clarendon Press.

Davis, S. (ed.). 1991. *Pragmatics. A Reader.* Oxford: OUP.

Delgado Lavín, E. 1999. *Even* as a constraint on relevance: The interpretation of *even-if* conditionals. Talk delivered at the Sixth International Colloquium on Cognitive Science, San Sebastian.

Donnellan, K. 1966. Reference and definite descriptions. *Philosophical Review* 77: 281-304. Reprinted in Schwartz, S. (ed.). 1977. *Naming, Necessity and Natural Kinds.* 42-65. Cornell University Press.

Ducrot, O. 1980. *Les echelles argumentatives.* Paris: Minuit.

Ducrot, O. 1984. *Le dire et le dit.* Paris: Minuit.

Ducrot, O. 1993. Pour une description non-véritative du langage. *Actes du congrès de linguistique de Séoul.* 86-98

Dudman, V. H. 1989. Vive la Révolution! *Mind* 98: 591-601.

Dummett, M. 1981. *Frege: Philosophy of Language.* 2nd edition. London: Duckworth.

Fauconnier, G. 1975. Pragmatic scales and logical structure. *Linguistic Inquiry* 6/3: 353-375.

Fillmore, C. J. & D. T. Langendoen (eds.). 1971. *Studies in Linguistic Semantics.* New York: Holt Rinehart & Winston.

Fodor, J. 1983. *The Modularity of Mind. An Essay on Faculty Psychology.* Cambridge, Mass.: MIT Press.

Fodor, J. 1985. Fodor's guide to mental representation. *Mind* 94: 76-100. Reprinted in Fodor, J. 1990. *A Theory of Content and Other Essays.* 3-29. Cambridge, MA: MIT Press. [Page references are to Fodor (1990)].

Fodor, J. D. 1977. *Semantics: Theories of Meaning in Generative Grammar.* Hassocks: The Harvester Press.

Foolen, A. 1991. Polyfunctionality and the semantics of adversative conjunctions. *Multilingua* 10-1/2: 79-92.

Francescotti, R. M. 1995. *Even*: The conventional implicature approach reconsidered. *Linguistics and Philosophy* 18: 153-173.

Fraser, B. 1998. Contrastive discourse markers in English. In Jucker & Ziv (1998). 301-326.

Frege, G. 1892. Über Sinn und Bedeutung. *Zeitschrift für Philosophie und philosophische Kritik* 100: 25-50. Translated as 'On sense and reference' in Geach & Black (1970). 56-78.

Frege, G. 1918. Der Gedanke. Eine logische Untersuchung. *Beiträge zur Philosophie des deutschen Idealismus* 1: 58-77. Translated as 'Thought' in McGuinness (1984). 351-372.

Geach, P. T. 1972. *Logic Matters.* Oxford: Blackwell.

Geach, P. & M. Black. 1970. *Translations from the Philosophical Writings of Gottlob Frege.* 3rd edition. Oxford: Blackwell.

Geirsson, H. & M. Losonsky (eds.).1996. *Readings in Language and Mind.* Oxford: Blackwell.

Green, G. 1976. Main clause phenomena in subordinate clauses. *Language* 52: 382-397.

Grice, H. P. 1957. Meaning. *The Philosophical Review* 66: 377-388. Reprinted in Grice (1989). 213-223.

Grice, H. P. 1961. The causal theory of perception. *The Aristotelean Society: Proceedings, Supplementary Volume.* Vol. 35: 121-152.

Grice, H. P. 1968. Utterer's meaning, sentence-meaning, and word-meaning. *Foundations of Language* 4: 225-242. Reprinted in Grice (1989). 117-137.

Grice, H. P. 1969. Utterer's meaning and intentions. *The Philosophical Review* 78: 147-177. Reprinted in Grice (1989). 86-116.

Grice, H. P. 1975. Logic and conversation. In Cole, P. & J. Morgan (eds.). *Syntax and Semantics. Vol. 3.* 41-58. New York: Academic Press. Reprinted in Grice (1989). 22-40.

Grice, H. P. 1978. Further notes on Logic and Conversation. In In Cole, P. & J. Morgan (eds.). *Syntax and Semantics. Vol. 9.* 113-127. New York: Academic Press. Reprinted in Grice (1989). 41-57.

Grice, H. P. 1989. *Studies in the Way of Words.* Cambridge, Mass.: Harvard University Press.

Gross, S. 1998. *Essays on Linguistic Context-Sensitivity and its Philosophical Significance.* Harvard University PhD thesis.

Grote, B., N. Lenke & M. Stede. 1997. Ma(r)king concessions in English and German. *Discourse Processes* 24: 87-117.

Haiman, J. & Thompson, S. A. (eds.) 1988. *Clause Combining in Grammar and Discourse.* Amsterdam: John Benjamins.

Hare, R. M. 1952. *The Language of Morals.* Oxford: Clarendon Press.

Hermes, H., F. Kambartel, F. Kaulbach (eds.). 1969. *Gottlob Frege: Nachgelassene Schriften.* Hamburg: Felix Meiner Verlag.

Hermodsson, L. 1978. *Semantische Strukturen im kausalen und konditionalen Bereich.* Uppsala: Amquist & Wiksell.

Higginbotham, J. 1988. Contexts, models, and meanings: a note on the data of semantics. In Kempson (1988). 29-48.

Hobbs, J. R. 1978. Why is discourse coherent? Technical note no. 176, SRI International, Menlo Park.

Horn, L. 1969. A presuppositional analysis of *only* and *even.* In Binnick, R. I. et al. (eds.). *Papers from the Fifth Regional Meeting of the Chicago Linguistics Society.* 98-107. Chicago, Illinois: University of Chicago.

Horn, L. 1985. Metalinguistic negation and pragmatic ambiguity. *Language* 61: 121-174.

Horn, L. 1989. *A Natural History of Negation.* Chicago: University of Chicago Press.

Horn, L.R. 1996. Presupposition and implicature. In: Lappin 1996. 299-319.

Hovy, E. & E. Maier. 1994. Parsimonious or profligate: How many and which discourse structure relations? Unpublished manuscript.

Ifantidou-Trouki, E. 1993. Sentential adverbs and relevance. *Lingua* 90: 69-90.

Ifantidou, E. 1994. *Evidentials and Relevance*. University of London PhD thesis. Revised version to be published by John Benjamins.

Iten, C. 1997. *Because* and *although*: a case of duality? *UCL Working Papers in Linguistics* 9: 55-76.

Iten, C. 1998a. *Because* and *although*: a case of duality? In Rouchota, V. & A. H. Jucker (eds.). *Current Issues in Relevance Theory*. 59-80. Amsterdam: John Benjamins.

Iten, C. 1998b. The meaning of *although*: a relevance theoretic account. *UCL Working Papers in Linguistics* 10: 81-108.

Iten, C. 2000. The relevance of Argumentation Theory. *Lingua* 110: 665-699.

Iten, C. forthcoming. *Even* and *even if* from a cognitive perspective.

Jucker, A. & Y. Ziv (eds.). 1998. *Discourse Markers: Descriptions and Theories*. Amsterdam: John Benjamins.

Kaplan, D. 1989a. Demonstratives. In Almog, J., H. Wettstein & J. Perry (1989). 481-563.

Kaplan, D. 1989b. Afterthoughts. In Almog, J., H. Wettstein & J. Perry (1989). 565-614.

Kaplan, D. 1998. What is meaning? Talk given in Paris.

Karttunen, L. & S. Peters. 1975. Conventional implicature in Montague Grammar. *BLS* 1:266-278.

Kay, P. 1990. *Even. Linguistics and Philosophy* 13: 59-111.

Kempson, R. 1975. *Presupposition and the Delimitation of Semantics*. Cambridge: CUP.

Kempson, R. (ed.). 1988. *Mental Representations: The Interface between Language and Reality*. Cambridge: CUP.

König, E. 1985. On the history of concessive connectives in English. Diachronic and synchronic evidence. *Lingua* 66: 1-19.

König, E. 1986. Conditionals, concessive conditionals and concessives: Areas of contrast, overlap and neutralization. In Traugott (1986). 229-246.

König, E. 1988. Concessive connectives and concessive sentences: Cross-linguistic regularities and pragmatic principles. In: Hawkins, J.A. (ed.). *Explaining Language Universals.* 145-166. Oxford: Blackwell.

König, E. 1989. Concessive relations as the dual of causal relations. In: D. Zaefferer (ed.). *Semantic Universals and Universal Semantics.* 190-209. Dordrecht: Foris.

König, E. 1991a. *The Meaning of Focus Particles. A Comparative Perspective.* London and New York: Routledge.

König, E. 1991b. Konzessive Konjunktionen. In Stechow & Wunderlich (1991). 631-639.

König, E. & P. Eisenberg. 1984. Zur Pragmatik von Konzessivsätzen. In: Stickel, G. (ed.) *Pragmatik in der Grammatik.* 313-332. Düsseldorf: Schwann.

Lahav, R. 1989. Against compositionality: the case of adjectives. *Philosophical Studies* 57: 261-279.

Lakoff, G. 1971. The role of deduction in grammar. In: Fillmore & Langendoen (1971). 62-70.

Lakoff, R. 1971. If's, and's and but's about conjunction. In: Fillmore & Langendoen (1971). 114-149.

Lang, E. 1984. *The Semantics of Coordination.* Amsterdam: John Benjamins.

Lappin, S. (ed.). 1996. *The Handbook of Contemporary Semantic Theory.* Oxford: Blackwell.

Larson, R. & G. Segal. 1995. *Knowledge of Meaning.* Cambridge, MA: MIT Press.

Levinson, S. 1979. Pragmatics and social deixis: reclaiming the notion of conventional implicature. *BLS* 5: 206-223.

Levinson, S. 1983. *Pragmatics.* Cambridge: CUP.

Löbner, S. 1987. Quantification as a major module of natural language semantics. In: Groenendijk, J. et al. (eds.) *Studies in Discourse Representation Theory and the Theory of Generalized Quantifiers.* 53-85. Dordrecht: Foris.

Löbner, S. 1990. *Wahr neben Falsch. Duale Operatoren als die Quantoren natürlicher Sprache.* Tübingen: Niemeyer.

Lycan, W. 1991. *Even* and *even if. Linguistics and Philosophy* 14: 115-150.

Lycan, W. 1999. *Philosophy of Language: A Contemporary Introduction.* London & New York: Routledge.

Lyons, J. 1977. *Semantics. Vol. 1.* Cambridge: CUP.

Mann, W. C. & S. A. Thompson. 1986. Relational propositions in discourse. *Discourse Processes* 9: 57-90.

Mann, W. C. & S. A. Thompson. 1988. Rhetorical Structure Theory: Toward a functional theory of text organisation. *Text* 8: 243-281.

McCawley, J. 1991. Contrastive negation and metalinguistic negation. *Chicago Linguistics Society* 19: *The Parasession on Negation*: 189-206.

McGuiness, B. (ed.). 1984. *Gottlob Frege. Collected Papers on Mathematics, Logic and Philosophy.* Oxford: Blackwell.

Miller, A. 1998. *Philosophy of Language.* London: UCL Press.

Moeschler, J. 1989. *Modélisation du dialogue.* Paris: Hermes.

Moeschler, J. & A. Reboul. 1994. *Dictionnaire encyclopédique de pragmatique.* Paris: Seuil.

Neale, S. 1992. Paul Grice and the philosophy of language. *Linguistics and Philosophy* 15: 509-559.

Neale, S. 1999. Colouring and composition. In Murasugi, R. & R. Stainton (eds.). *Philosophy and Linguistics.* 35-82. Boulder: Westview.

Nyan, T. 1998. *Metalinguistic Operators with Reference to French.* Bern: Peter Lang.

Oversteegen, L. 1997. On the pragmatic nature of causal and contrastive connectives. *Discourse Processes* 24: 51-85.

Papafragou, A. forthcoming. *Modality: Issues in the Semantics-Pragmatics Interface.* Oxford: Elsevier Science.

Perry, J. 1977. Frege on demonstratives. *Philosophical Review* 86: 474-497. Reprinted in Davis (1991). 146-159.

Perry, J. 1998. Indexicals, contexts and unarticulated constituents. In Aliseda, A. et al. (eds.). *Computing Natural Language.* 1-11. CSLI Publications.

Pollock, J. 1976. *Subjunctive Reasoning.* Dordrecht: Reidel.

Quirk, R. et al. 1972. *A Grammar of Contemporary English.* London: Longman.

Recanati, F. 1987. *Meaning and Force. The Pragmatics of Performative Utterances.* Cambridge: CUP.

Recanati, F. 1993. *Direct Reference: From Language to Thought.* Oxford: Blackwell.

Recanati, F. 1998. Pragmatics. In Craig, E. (ed.). *Routledge Encyclopaedia of Philosophy.* 620-633. London: Routledge.

Recanati, F. forthcoming. Open quotation.

Rieber, S. 1997. Conventional implicatures as tacit performatives. *Linguistics and Philosophy* 20: 51-72.

Rouchota, V. 1990. 'But': Contradiction and relevance. *UCL Working Papers in Linguistics* 2: 65-81.

Rouchota, V. 1998a. Procedural meaning and parenthetical discourse markers. In Jucker & Ziv (1998). 97-126.

Rouchota, V. 1998b. Connectives, coherence and relevance. In Rouchota & Jucker (1998). 11-57.

Rouchota, V. & A. H. Jucker (eds.). 1998. *Current Issues in Relevance Theory.* Amsterdam: John Benjamins.

Rudolph, E. 1996. *Contrast: Adversative and Concessive Expressions on Sentence and Text Level.* Berlin: Walter de Gruyter.

Searle, J. R. 1965. What is a speech act? In M. Black (ed.). *Philosophy in America.* 221-239. Ithaca, NY: Cornell University Press.

Searle, J. R. 1968. Austin on locutionary and illocutionary acts. *Philosophical Review* 77: 405-424.

Searle, J. R. 1969. *Speech Acts. An Essay in the Philosophy of Language.* Cambridge: CUP.

Searle, J. R. 1979. *Expression and Meaning. Studies in the Theory of Speech Acts.* Cambridge: CUP.

Sidiropoulou, M. 1992. On the connective *although. Journal of Pragmatics* 17: 201-221.

Sperber, D. 1994a. Understanding verbal understanding. In Khalfa, J. (ed.) *What Is Intelligence?* 179-198. Cambridge: CUP.

Sperber, D. 1994b. The modularity of thought and the epidemiology of representations. In Hirschfeld, L. & S. Gelman (eds.). *Mapping the Mind: Domain Specificity in Cognition and Culture.* 39-67. Cambridge: CUP.

Sperber, D. & D. Wilson. 1978. Les ironies comme mentions. Poétique 36: 399-412.

Sperber, D. & D. Wilson. 1981. Irony and the use-mention distinction. In Cole, P. (ed.). *Radical Pragmatics.* 295-318. New York: Academic Press.

Sperber, D. & D. Wilson. 1986. *Relevance: Communication and Cognition.* Oxford: Blackwell.

Sperber, D. & D. Wilson. 1995. Postface. In Sperber, D. & D. Wilson. *Relevance: Communication and Cognition.* 2nd edition. 255-279. Oxford: Blackwell.

Sperber, D. & D. Wilson. 1998. The mapping between the mental and the public lexicon. In Carruthers, P. & J. Boucher (eds.). *Thought and Language.* 184-200. Cambridge: CUP.

Stalnaker, R. 1974. Pragmatic presuppositions. In Munitz, M. & P. Unger (eds.). *Semantics and Philosophy.* 197-214. New York: New York University Press. Reprinted in Davis (1991). 471-481.

Stanley, J. 2000. Context and logical form. *Linguistics and Philosophy* 23: 391-434.

Stechow, A. von & D. Wunderlich. (eds.) 1991. *Semantik/Semantics. Ein internationales Handbuch der zeitgenössischen Forschung/ An International Handbook of Contemporary Research.* Berlin & New York: Walter de Gruyter.

Strawson, P. F. 1971. *Logico-Linguistic Papers.* London: Methuen.

Strawson, P. F. 1973. Austin and 'locutionary meaning'. In Berlin et al. (1973). 46-68.

Sweetser, E. E. 1990. *From Etymology to Pragmatics. Metaphorical and Cultural Aspects of Semantic Structure.* Cambridge: CUP.

Takeuchi, M. 1998. Cause-consequence conjunctive Particles in Japanese. In Rouchota & Jucker (1998). 81-103.

Tarski, A. 1944. The semantic conception of truth and the foundation of semantics. *Philosophy and phenomenological research* 4: 341-375. Reprinted in Geirsson & Losonsky (1996). 36-64.

Traugott, C. E. et al. (eds.). 1986. *On Conditionals*. Cambridge: CUP.

Van der Auwera, J. 1986. Conditionals and speech acts. In Traugott (1986). 197-214.

Van der Sandt, R. A. 1988. *Context and Presupposition*. London: Croom Helm.

Veltman, F. 1986. Data semantics and the pragmatics of indicative conditionals. In Traugott (1986). 147-168.

Wilson, D. 1975. *Presuppositions and Non-Truth-Conditional Semantics*. New York/London: Academic Press.

Wilson, D. unpublished a. Varieties of non-truth-conditional meaning.

Wilson, D. unpublished b. Semantic theory lecture notes. UCL 1998-9.

Wilson, D. & D. Sperber. 1988a. Mood and the analysis of non-declarative sentences. In Dancy, J., J. Moravcsik & C. Taylor (eds.). *Human Agency: Language, Duty and Value*. 77-101. Stanford, CA: Stanford University Press.

Wilson, D. & D. Sperber. 1988b. Representation and relevance. In Kempson (1988). 133-153.

Wilson, D. & D. Sperber. 1992. On verbal irony. *Lingua* 87. 1/2: 53-76.

Wilson, D. & D. Sperber. 1993. Linguistic form and relevance. *Lingua* 90: 1-25.

Wilson, D. & D. Sperber. 1998. Pragmatics and time. In Carston R. & S. Uchida (eds.). *Relevance Theory: Applications and Implications*. 1-22. Amsterdam: John Benjamins.

Wilson, D. & D. Sperber. forthcoming. Truthfulness and relevance.

Winter, Y. & M. Rimon 1994. Contrast and implication in natural language. *Journal of Semantics* 11: 365-406.

Zagar, I. Z. 1999. Argumentation in the language system: Between particles and polyphony. Talk delivered at PRAGMA 99 in Tel Aviv. (ms. Educational Research Institute, Slovenia).